

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Shield-Brite[®] AP-450
Product Code: 10408
Product Use: Shellac Coating for Apples
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:

Flammable, Category 3
Eye irritation, Category 2A
Skin Sensitization, Category 1

Hazard Symbols:



Signal Word:

WARNING

Hazard Statements:

H226 Flammable liquid and vapor.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.

Other Hazards:

Hazard(s) not otherwise classified (HNOC):

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/and process equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective clothing, safety glasses and chemical resistant gloves.
P264 Wash hands thoroughly after handling.
P261 Avoid breathing mist/vapors/ or spray.
P272 Contaminated work clothing should not be allowed out of the workplace.

Response Statements:

P303/361/353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water, shower with plenty of soap and water.
P370/378 In case of fire. Use water fog, alcohol resistant foam, dry chemical, or carbon dioxide to extinguish.
P333/313 If skin irritation or rash occurs: Get medical advice/attention.
P362/364 Take off contaminated clothing and wash it before reuse.
P321 Specific treatment See Section 4 First Aid Measures.
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:

P403/235 Store in 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>Concentration (w/w %)</u>
Isopropanol	67-63-0	11.4 %
Resin Acids and Rosin Acids, Fumarated, Esters with Pentaerythritol	94581-15-4	2.1 %
1,2-Propanediol	57-55-6	0.6 %
Other ingredients*	Balance	85.9 %

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



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) 1-888-271-4649 for emergency medical treatment information.
Advice:	
If on Skin (or hair):	Take off immediately all contaminated clothing. Wash skin with plenty of soap and water/shower. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
If in Eyes:	Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If eye irritation persists: Get medical advice/attention.
If Ingested:	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Obtain medical attention.
If Inhaled:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible.
Most important Symptoms / effects, acute and Delayed:	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of any immediate medical attention and special treatment needed:	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.
Unsuitable Extinguishing Media:	Do not use water jet as an extinguisher, as this will spread the fire.
Special Hazards Arising from the Chemical:	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.
Special protective equipment and precautions for firefighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions:	Move containers from fire area if you can do so without risk. Flammable liquid and vapor.
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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. 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
Environmental Precautions:	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.



**Containment / Clean-Up
Methods:**

Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. 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.

7. HANDLING & STORAGE

**Precautions for
Safe Handling:**

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

**Conditions for
Safe Storage,
including any
Incompatibilities:**

Store in original tightly closed container.
Keep away from heat, sparks and open flame.
Prevent electrostatic charge build-up by using common bonding and grounding techniques.
Store in a cool, dry place out of direct sunlight.
Store in a well-ventilated place.
Store away from incompatible materials (see Section 10 of the SDS).
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
Isopropanol (CAS 67-63-0)	PEL	980 mg/m3 400 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropanol (CAS 67-63-0)	STEL	1225 mg/m3 500 ppm
	TWA	980 mg/m3 400 ppm

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	FORM
1,2-Propanediol (CAS 57-55-6)	TWA	10 mg/m3	Aerosol

Biological Limit Values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Isopropanol (CAS 67-63-0)	40 mg/L	Acetone	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

**Appropriate engineering
controls**

See above
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 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 an impervious apron or clothing.
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	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

Physical state:	Liquid	Upper/Lower flammability limits:	Not available
Appearance / Color:	Clear reddish liquid	Vapor pressure:	Not available
Odor:	Alcoholic	Vapor density: (air =1)	Not available
Odor threshold:	Not available	Specific Gravity: (H₂O = 1)	1.01
pH:	7.6	Solubility:	Miscible 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:	Not established	Decomposition temperature:	Not available
Flash point:	91.4°F (33°C) closed cup	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:	This product may react with strong oxidizing agents.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur.
Chemical stability:	Stable under recommended storage conditions.
Conditions to avoid:	Avoid heat, sparks, open flames and other ignition sources. Do not mix with other chemicals.
Incompatible materials:	Acids. Strong oxidizing agents. Isocyanates. Chlorine.
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 corrosion / irritation:	May cause an allergic skin reaction.
Eye damage / irritation:	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. May cause an allergic skin reaction. Dermatitis. Rash.



Information on toxicological effects

Acute toxicity May cause an allergic skin reaction.

Components	Species	Test Results
1,2-Propanediol (CAS 57-55-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	20800 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Dog	19000 mg/kg
	Guinea pig	184000 mg/kg
	Mouse	23900 mg/kg
	Rabbit	14800 mg/kg
	Rat	20000 mg/kg
Isopropanol (CAS 67-63-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	12800 mg/kg, HSDB 16.4 ml/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Rat	> 10000 ppm, 6 Hours, ECHA 16980 mg/l/4h, HMIRA
<i>Oral</i>		
LD50	Dog	4797 mg/kg, HSDB
	Mouse	3600 mg/kg, HSDB
	Rabbit	5030 mg/kg, HSDB
		5 g/kg, HSDB
	Rat	5.8 g/kg, ECHA
Resin Acids And Rosin Acids, Fumarated, Esters With Pentaerythritol (CAS 94581-15-4)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, 24 Hours, ECHA
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, ECHA > 2000 mg/kg, ECHA
Skin corrosion/irritation:	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye Irritation:	Causes serious eye irritation.	
Respiratory sensitization:	Not a respiratory sensitizer.	
Skin sensitization:	May cause an allergic skin reaction.	
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.	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
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:	Material does not present an aspiration hazard.	



12. ECOLOGICAL INFORMATION

Ecotoxicity	See below		
Ecotoxicological data	Species		Test Results
Components			
1,2-Propanediol (CAS 57-55-6)			
Crustacea	EC50	Daphnia	10000 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/L, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	710 mg/L, 96 hours
Isopropanol (CAS 67-63-0)			
Algae	IC50	Algae	1000 mg/L, 72 Hours
Crustacea	EC50	Daphnia	13299 mg/L, 48 Hours
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/L, 96 hours
Persistence/ degradability:	No data is available on the degradability of this product.		
Bioaccumulative potential			
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:	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.
Hazardous waste code:	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
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

UN number:	<u>DOT</u> UN 1993	<u>IMDG</u> Not applicable	<u>IATA</u> Not applicable
Proper shipping name:	Flammable liquids, n.o.s. (Isopropanol)	Not regulated	Not regulated
Hazard class(es):	3	Not applicable	Not applicable
Packing group:	III	Not applicable	Not applicable
Marine Pollutant:	Not applicable		
Special precautions:	B1, B52, IB3, T4, TP1, TP29		
Packaging exceptions:	150		
Packaging Non Bulk:	203		
Packaging Bulk:	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.
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.



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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Isopropanol (CAS 67-63-0)

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 - Yes
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.

Chemical Name

CAS number

% by wt.

Isopropanol

67-63-0

11.4

US STATE

REGULATIONS

US - California Hazardous Substances (Director's):

Isopropanol (CAS 67-63-0)

Listed

US - Illinois Chemical Safety Act: Listed substance

Isopropanol (CAS 67-63-0)

Listed

US - Louisiana Spill Reporting: Listed substance

Isopropanol (CAS 67-63-0)

Listed

US - Minnesota Haz Subs: Listed substance

1,2-Propanediol (CAS 57-55-6)

Isopropanol (CAS 67-63-0)

Listed

US - New Jersey RTK - Substances: Listed substance

1,2-Propanediol (CAS 57-55-6)

Isopropanol (CAS 67-63-0)

Listed

US - Texas Effects Screening Levels: Listed substance

1,2-Propanediol (CAS 57-55-6)

Isopropanol (CAS 67-63-0)

Listed

Listed

US. Massachusetts RTK - Substance List

Isopropanol (CAS 67-63-0)

Listed

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

Isopropanol (CAS 67-63-0)

Listed

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

1,2-Propanediol (CAS 57-55-6)

Isopropanol (CAS 67-63-0)

Listed

US. Rhode Island RTK

Isopropanol (CAS 67-63-0)

Listed

US. California Proposition 65

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: 8-9-17

Replaces MSDS dated: May 26, 2015

Changes since last New format to SDS

revision:

