

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: PacRite[®] Fungaflor 75 WSG **EPA Reg #** 43813-26-64864
Product Code: 10059
Product Use: Water Soluble Granule for Post Harvest Treatment of Citrus Fruits
Supplier: 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 (PROSAR)
Transportation Emergency Phone Number: 800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

Classification:
Acute Oral, Category 4
Eye irritation, Category 1
Skin Sensitization, Category 1B
Acute Aquatic Toxicity, Category 1
Long Term Aquatic Toxicity, Category 1

Hazard Symbols:



Hazard Statements:
DANGER
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H317 May cause allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention Statements:

P261 Avoid breathing dust, fume, gas, mist, vapour, or spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective clothing, chemical resistant gloves, and safety glasses or face protection.
P273 Avoid release to the environment.

Response Statements:

P301/312/330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor for medical advice.
P302/352 IF ON SKIN: Wash with plenty of soap and water.
P333/313 If skin irritation or rash occurs: Get medical advice/attention.
P321 Specific Treatment see Section 4 First Aid Measures.
P362/364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Storage Statements:

Store locked up.

Disposal Statements:

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS #</u>	<u>Concentration (w/w %)</u>
1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)-1H-imidazolium hydrogen sulphate	58594-72-2	>90 % - <100 %
Proprietary food grade ingredients		balance



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.
Advice:	
If on Skin:	Take off contaminated clothing. Wash skin with plenty of soap and water 15-20 minutes. If redness, burning, or irritation persists, get medical advice/attention. Wash contaminated clothing 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. Get medical advice/attention.
If Swallowed:	Call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. 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.
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.
Notes to physician:	Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Extinguishing Media:	Do not use Water spray jet to extinguish. Use water mist, foam, dry powder, carbon dioxide, sand, or foam for extinguishing fire. Water spray may be used to keep fire exposed containers cool.
Special Exposure Hazards:	Not combustible. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Heating can release hazardous gases, nitrogen oxides, carbon oxides, sulphur oxides and hydrogen chloride gas.
Special Protective Equipment / Procedures for Firefighters:	Wear self-contained breathing equipment and fire resistant personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Evacuate personnel to safe areas. Keep away from open flames, hot surfaces and sources of ignition. Wear impervious clothing, shoes, socks and chemical resistant gloves made of nitrile rubber, polyethylene, butyl-rubber, neoprene, PVC, or natural rubber and safety glasses or face protection. *For long sleeve gloves, take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Environmental Precautions:	In case of spill isolate area and deny entry to unnecessary personnel. Do not allow product to enter sewers, lakes, streams or other bodies of water.
Containment / Clean-Up Methods:	Stop spill at the source. Construct temporary dikes of dirt, sand, or other appropriate material to prevent spreading of the material. Absorb with an inert material such as sand or vermiculite and place in an appropriate labeled container for disposal.

7. HANDLING & STORAGE

Handling:	Ensure all equipment is electrically grounded before beginning transfer operations. Avoid contact with skin and eyes. To avoid thermal decomposition, do not overheat. Good standards of hygiene should be maintained at all times. Smoking, eating, and drinking are prohibited in the work area. For personal protection wear impervious clothing, shoes, socks and chemical resistant gloves made of nitrile rubber, polyethylene, butyl-rubber, neoprene, PVC, or natural rubber and safety glasses or face protection. *For long sleeve gloves, take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Storage:	To maintain product quality, do not store in heat or direct sunlight. Store in a dry, cool, well ventilated area at room temperature (recommended 15 – 25°C). Keep container tightly closed when not in use. Store in original container. Keep out of reach of children and livestock. Store in locked location away from heat and sources of ignition.



8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits: 1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)0]-1H-imidazolium hydrogen sulphate
CAS# 58594-72-2

0.125 mg/m³ TWA (J&J OEL/PBOEL HHC)

1 B PBOEL-HHC (J&J OEL/PBOEL HHC)

Further information: J&J has a hazard banding notation: PBOEL HHC. This substance is classified by J&J as being PBOEL HHC 1B., Notation DSEN: has the potential to cause delayed allergic skin reaction (sensitization), such as wheals and rashes.

Engineering Controls:

Local exhaust ventilation maybe necessary to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Provide mechanical ventilation for confined spaces.

Personal Protective Equipment :



Clothing: Wear impervious clothing, shoes, socks and chemical resistant gloves made of nitrile rubber, polyethylene, butyl-rubber, neoprene, PVC, or natural rubber.

*For long sleeve gloves, take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye Protection: Wear safety glasses or face protection. Eye fountain and washing facilities should be present at work area.

Respiratory Protection: Not normally required under normal treatment at room temperature. In dusty or misty environments, use a dust/mist filtering respirator (MSHA/NIOSH approved number prefix TC-21C) or a NIOSH-approved respirator with any N, P, R, or HE pre-filter.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical:	Granules		
Appearance:	Beige	Upper/Lower flammability limits:	Upper limit no data available, Lower limit 60 g/m ³
Odor:	Characteristic	Vapor pressure:	<0.000001 mPA (20-25°C)
Odor threshold:	Not available	Vapor density: (air =1)	Not available
pH:	2.6,(as aqueous solution)	Specific Gravity: (H₂O = 1)	0.63 – 0.68 kg/m ³
Melting/Freezing point:	128.6 – 132.6°C	Solubility:	5,656 g/l (20°C)
		Solubility with Acetone:	9.538 g/l
		Solubility with Methanol:	>250 g/l
		Solubility with Ethylacetate:	.084 g/l
		Solubility with Xylene:	.22 g/l
Boiling point:	Not applicable	Partition coefficient (n-octanol-water):	Log Pow: 3.31
Flash point:	No data available	Auto-ignition temperature:	460°C Method: M.I.T. Dust Cloud BAM Method
Evaporation rate:	Not applicable	Decomposition temperature:	330°C Minimum T
Flammability (solid, gas):	Not applicable	Viscosity:	Not available



10. STABILITY & REACTIVITY

Reactivity hazards:	None known
Chemical stability:	Stable under recommended storage conditions
Conditions to avoid:	To avoid thermal decomposition, do not overheat. Avoid heat, flames, sparks, and exposure to sunlight, moisture, or light.
Incompatible materials:	No specific data.
Hazardous decomposition products:	Carbon monoxide, sulphur oxides, nitrogen oxides (NOx), HCl

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Acute Oral: LD ₅₀ (Rat, male and female): 500mg/kg	Based on Ingredients
	Assessment: The component/mixture is moderately toxic after single ingestion.	
	Acute Dermal: LD ₅₀ : > 2001 mg/kg	
	Inhalation: LC ₅₀ : > .66 mg/L	
Skin corrosion/irritation:	Causes mild skin irritation	
Eye damage/irritation:	Causes serious eye damage. Corrosive to eyes.	
Respiratory/Skin sensitization:	Probability or evidence of low to moderate skin irritation. Based on Buehler Test. Did not cause sensitization on laboratory animals.	
Germ cell mutagenicity:	In Vitro: Ames test, didn't show mutagenic effects based on similar data. Chromosome aberration test in vitro, based on human lymphocytes – didn't show mutagenic effects. Based on similar data. In Vivo: In vivo micronucleus test, negative. Did not show mutagenic effects in animal experiments.	
Carcinogenicity:	No information available. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, OSHA, NTP	
Reproductive toxicity:	No evidence of reprotoxicity. Fertility: Species Rat, dose: 40 mg/kg/day Information is based on data obtained from similar substances. No adverse effects on sexual function and fertility. Species Rabbit, Information is based on data obtained from similar substances. No adverse effects on sexual function and fertility. Fetal development: Species rat, mouse, rabbit Information is based on data obtained from similar substances. Negative.	
Target organ effects:	No known target organ effects.	
Aspiration hazard:	Material does not present an aspiration hazard.	
Potential health effects:	May cause redness and reversible irritation to eyes. Prolonged or repeated contact may cause skin irritation.	

12. ECOLOGICAL INFORMATION

Toxicity:	EC50 (Oncorhynchus mykiss(rainbow trout)) 1:48 mg/l Exposure time 96 hr EC50 (Daphnia(water flea)): 3.5 mg/l Exposure time 48 hr EC50 (Pseudokirchneriella subcapitata (green algae)): 0.87 mg/l Exposure time 72 hr M-Factor(Acute aquatic toxicity) 1	Based on Ingredients
	Very toxic to aquatic life with long lasting effects.	
Persistence/ degradability:	Not readily biodegradable.	
Bioaccumulative potential:	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.	
Mobility in soil:	No data available	



Other adverse effects: Very toxic to aquatic life with long lasting effects.
 This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

13. DISPOSAL CONSIDERATIONS

Disposal methods: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Do not discharge into sewers, lakes, streams, or other bodies of water.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: For containers <=5 gallons in size. Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill.

14. TRANSPORT INFORMATION

	<u>DOT</u>	<u>IMDG</u>	<u>IATA</u>
UN number:	UN 3077	UN 3077	UN 3077
Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (imazalil sulphate)	Environmentally hazardous substance, solid, n.o.s. (imazalil sulphate)	Environmentally hazardous substance, solid, n.o.s. (imazalil sulphate)
Hazard class(es):	9	9	9
Packing group:	III	III	III
Special precautions:	None		

15. REGULATORY INFORMATION

FIFRA: PacRite ® Fungaflor 75 WSG is registered as a pesticide with the U.S. EPA under registration number 43813-26-64864.

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act: This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A. This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.

Massachusetts Right to Know: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know: 1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)]-1H-imidazolium hydrogen sulphate
 CAS# 58594-72-2 90 – 100%

New Jersey Right to Know: 1-[2-(allyloxy)ethyl-2-(2,4-dichlorophenyl)]-1H-imidazolium hydrogen sulphate
 CAS# 58594-72-2 90 – 100%

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Other regulations: Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.



The components of this product are reported in the following inventories:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

- : Danger
- : Corrosive
- : Causes irreversible eye damage.
- : May be fatal if swallowed or inhaled.
- : Harmful if absorbed through the skin.
- : Do not get in eyes, or on clothing.
- : Avoid contact with skin, eyes or clothing.
- : Do not breathe dust.

Inventories: AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

16. OTHER INFORMATION

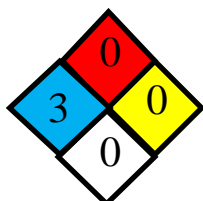
HMIS Ratings:

Health – 3

Flammability – 0

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, to the extent consistent with applicable law, 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, to the extent consistent with applicable law, 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. Except to the extent a particular use and particular information are expressly stated on the product label, 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) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABEL (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom"). The product label provides information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products is regulated by the EPA under the authority of FIFRA through the product label. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label. It is a violation of federal law to use an EPA-registered pesticide product in any manner inconsistent with its labeling.

SDS preparation date: July 21, 2016

Replaces SDS dated: August 20, 2015

Changes since last Section 15

revision:

