

## SAFETY DATA SHEET

### 1. PRODUCT & COMPANY IDENTIFICATION

**Product Name:** Acidex Duo  
**Product Code:** 10361  
**Product Use:** Dual Spectrum Fruit Cleaner  
**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, CORROSIVE Category 1  
Skin irritation, Category 1B  
Eye irritation, Category 1  
Skin Sensitization, Category 1

**Hazard Symbols:**



**Signal Word:**  
DANGER

**Hazard Statements:**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H317 May cause an allergic skin reaction.

**Other Hazards:**

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

**Precautionary Statements:**

**Prevention Statements:**

P234 Keep only in original container.  
P260 Do not breathe mists.  
P264 Wash hands thoroughly after handling.  
P280 Wear impermeable clothing, safety goggles or face shield and chemical resistant gloves.  
P261 Avoid breathing mist, vapors or sprays.  
P272 Contaminated work clothing should not be allowed out of the workplace.

**Response Statements:**

P390 Absorb spillage to prevent material damage.  
P301/330/331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303/361/353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P363 Wash contaminated clothing before reuse.  
P333/313 If skin irritation or rash occurs: Get medical advice/attention.  
P321 Specific treatments see Section 4 First Aid Measures.  
P304/340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P310 Immediately call a POISON CENTER or doctor for medical advice.  
P321 Specific treatments 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.  
P310 Immediately call a POISON CENTER or doctor for medical advice.  
**Storage Statements:**  
P406 Store in corrosive resistant container with a resistant inner liner.  
P405 Store locked up.  
**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>
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	5.5%
d-Limonene	5989-27-5	5.0%
Phosphoric acid	7664-38-2	4.5%
C6-C12 alkyl alcohol ethoxylate phosphoric acid	68921-24-4	3.2%
Glucopyranose, oligomeric, decyl octyl glycosides	68515-73-1	2.0%
Other ingredients*	Balance	79.8%

\*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 redness, burning, rash or irritation persists, get medical advice/attention. Wash contaminated clothing 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. Immediately call a POISON CENTER or doctor for medical advice.
<b>If Ingested:</b>	Rinse mouth, DO NOT induce vomiting.
<b>If Inhaled:</b>	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor for medical advice. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible.
<b>Most important Symptoms / effects, acute and Delayed:</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.
<b>Indication of any immediate medical attention and special treatment needed:</b>	Treat patient symptomatically.

### 5. FIRE FIGHTING MEASURES

<b>Suitable Extinguishing Media:</b>	Not flammable. Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool.
<b>Unsuitable Extinguishing Media:</b>	Not available.
<b>Special Hazards Arising from the Chemical:</b>	During fire, gases hazardous to health may be formed. May include and are not limited to: Oxides of phosphorus.
<b>Special protective equipment and precautions for firefighters:</b>	Firefighters should wear full protective clothing including self-contained breathing apparatus. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
<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>Hazardous combustion products:</b>	May include and are not limited to: Oxides of phosphorus.



**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency procedures:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. 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).

**Environmental Precautions:** Do not allow product to enter sewers, lakes, streams or other bodies of water.

**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:** Use good industrial hygiene practices in handling this material. DO NOT get in eyes, on skin or clothing. Use only with adequate ventilation. Do not breathe mist or vapor. Keep container tightly closed. Wear appropriate personal protective equipment (see Section 8 of the SDS). Wash thoroughly after handling. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas.

**Conditions for Safe Storage, including any Incompatibilities:** Store locked up. Store in a cool, dry, well-ventilated place. Store in a corrosion resistant container with a resistant inner liner. Store away from incompatible materials (see Section 10 of the SDS). Keep container upright to prevent leakage and release into environment. 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
Phosphoric Acid CAS# 7664-38-2	PEL	1 mg/m3

**US. ACGIH Threshold Limit Values**

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

Components	Type	Value
Phosphoric Acid CAS# 7664-38-2	STEL	3 mg/m3
	TWA	1 mg/m3

**US. AIHA Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value
d-Limonene CAS# 5989-27-5	TWA	165.5 mg/m3 30 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**

<b>Eye/face protection</b>	Wear chemical goggles or face shield. Eye fountain and washing facilities should be available.
<b>Skin protection</b>	
<b>Hand protection</b>	Nitrile, neoprene, and vinyl (PVC) gloves or other impervious gloves.
<b>Other</b>	Use of an impervious apron or clothing.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator, acid gas filter combination. 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)
<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.

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**9. PHYSICAL & CHEMICAL PROPERTIES**

<b>Physical state:</b>	Liquid	<b>Upper/Lower flammability limits:</b>	Not available
<b>Appearance / Color:</b>	Pale Amber Translucent	<b>Vapor pressure:</b>	Not available
<b>Odor:</b>	Orange Odor	<b>Vapor density: (air =1)</b>	Not available
<b>Odor threshold:</b>	Not available	<b>Specific Gravity: (H<sub>2</sub>O = 1)</b>	1.025
<b>pH:</b>	2.5	<b>Solubility:</b>	100% Soluble
<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>	Not flammable	<b>Viscosity:</b>	Not available
<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

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**10. STABILITY & REACTIVITY**

<b>Reactivity hazards:</b>	May be corrosive to metals. 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>	Do not mix with other chemicals.
<b>Incompatible materials:</b>	Bases. Reducing agents. Oxidizers. Metals.
<b>Hazardous decomposition products:</b>	May include and are not limited to: Oxides of phosphorus.

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**11. TOXICOLOGICAL INFORMATION**

<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Causes digestive tract burns. May cause stomach distress, nausea or vomiting.
<b>Inhalation</b>	May cause respiratory tract irritation or chemical burns.
<b>Skin corrosion / irritation:</b>	May cause chemical burns. Harmful contact may not cause immediate pain. May cause an allergic skin reaction.
<b>Eye damage / irritation:</b>	Causes serious eye damage.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Contact with this material may cause burns to the skin, eyes and mucous membranes.



**Information on toxicological effects**

**Acute toxicity** May cause severe skin burns and eye damage. May cause an allergic skin reaction.

Components	Species	Test Results
Alcohols, C12-14-secondary, ethoxylated (CAS 84133-50-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg 1600 mg/kg
C6-C12 alkyl alcohol ethoxylate phosphoric acid (CAS 68921-24-4)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	3950 mg/kg
<i>Inhalation</i>		
LC50	Not available	
d-Limonene (CAS 5989-27-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Mouse	5600 mg/kg
	Rat	> 2000 mg/kg 4400 mg/kg
Glucopyranose, oligomeric, decyl octyl glycosides (CAS 68515-73-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
	Rat	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg > 2000 mg/kg
Phosphoric acid (CAS 7664-38-2)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	2740 mg/kg
<i>Inhalation</i>		
LC50	Guinea pig, Mouse, Rabbit, Rat	61 mg/m3, 1 Hours
<i>Oral</i>		
LD50	Rat	1530 mg/kg 1.7 ml/100g

**Skin corrosion/irritation:** Causes severe skin burns and eye damage.

**Serious eye damage/eye** Causes serious eye damage.

**Irritation:**

**Respiratory sensitization:** Not a respiratory sensitizer.

**Skin sensitization:** May cause an allergic skin reaction.

**Germ cell mutagenicity:** Non-hazardous by WHMIS/OSHA criteria.

**Carcinogenicity:** Non-hazardous by WHMIS/OSHA criteria.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

d-Limonene (CAS 5989-27-5) Volume 73 - 3 Not classifiable as to carcinogenicity to humans.



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

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>Species</b>		<b>Test Results</b>
<b>Components</b>			
Alcohols, C12-14-secondary, ethoxylated (CAS 84133-50-6)			
<b>Aquatic</b>			
Fish	LC50	Bluegill ( <i>Lepomis macrochirus</i> )	3.2 - 7.2 mg/L, 96 hours
d-Limonene (CAS 5989-27-5)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea ( <i>Daphnia pulex</i> )	69.6 mg/L, 48 hours
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> )	0.619 - 0.796 mg/L, 96 hours
Phosphoric acid (CAS 7664-38-2)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	LC50	Water flea ( <i>Daphnia magna</i> )	4.6 mg/L, 12 hr
Fish	LC50	Mosquitofish ( <i>Gambusia affinis affinis</i> )	3 - 3.5 mg/L, 96 hr
<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 instructions:</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>Hazardous waste code</b>	D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel] 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

	<u>DOT</u>
<b>UN number:</b>	UN 3264
<b>Proper shipping name:</b>	Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric Acid)
<b>Hazard class(es):</b>	8
<b>Packing group:</b>	III
<b>Marine Pollutant:</b>	IMDG Regulated Marine Pollutant.
<b>Special precautions:</b>	IB3, T7, TP1, TP28
<b>Packaging exceptions:</b>	154
<b>Packaging Non Bulk:</b>	203
<b>Packaging Bulk:</b>	241

#### 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)**

Phosphoric Acid (CAS# 7664-38-2)

Listed

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

Phosphoric acid (CAS 7664-38-2)

Not regulated.

**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):**

Phosphoric acid (CAS 7664-38-2)

Listed

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

Phosphoric acid (CAS 7664-38-2)

Listed

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

Phosphoric acid (CAS 7664-38-2)

Listed

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

Phosphoric acid (CAS 7664-38-2)

Listed

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

Phosphoric acid (CAS 7664-38-2)

Listed

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

Alcohols, C12-14-secondary, ethoxylated  
(CAS 84133-50-6)

Listed

d-Limonene (CAS 5989-27-5)

Listed

Glucopyranose, oligomeric, decyl octyl

Listed

glycosides (CAS 68515-73-1)

Phosphoric acid (CAS 7664-38-2)

Listed

**US. Massachusetts RTK - Substance List**

Phosphoric acid (CAS 7664-38-2)

Listed

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

Listed



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

Phosphoric acid (CAS 7664-38-2) Listed

**US. Rhode Island RTK**

Phosphoric acid (CAS 7664-38-2) Listed

**US. California Proposition 65**

Not listed.

**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**

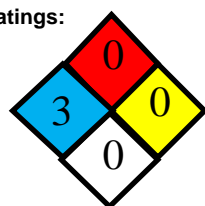
HMIS Ratings:

Health – 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, 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:** June 16, 2017

**Replaces MSDS dated:** April 18, 2017

**Changes since last** Section 2, Hazard Identification

**revision:** Section 4, First Aid Measures

Version: 3

