

# SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name **Phosflex 375**  
 Product id 7091  
 Revision date 14/03/2016 Revision: 1

## 1. Identification of the substance & the company

**Chemical name** Proprietary mixture of phosphate esters  
**Type of product and use** Flame-retardant plasticizer  
**Supplier** ICL-IP America Inc.  
 622 Emerson Road - Suite 500  
 St Louis, Missouri 63141, USA  
 Tel:(314)983-7884 Fax:(314)983-7607  
 e-mail:msdsinfo@icl-group.com  
**Emergency Telephone** Medical: PROSAR 1-888-875-1685 (24HRS)  
 Chemtrec: (800) 424-9300

## 2. Hazards identification

**GHS classification** Aquatic Acute 1, H400 - Very toxic to aquatic life  
 Aquatic Chronic 1, H410 - Very toxic to aquatic life with long lasting effects



**Signal Word** WARNING  
**Hazard statements** H410 - Very toxic to aquatic life with long lasting effects  
**Precautionary statements** P273 - Avoid release to the environment  
 P391 - Collect spillage  
 P501 - Dispose of contents/container in accordance with national and international regulations  
**NFPA Ratings (Scale 0-4)** Health = 1, Fire = 1, Reactivity = 0.  
**HMIS Ratings (Scale 0-4)** Health = 1, Fire = 1, Reactivity = 0.

## 3. Composition / information on ingredients

Components	CAS No.	Weight %
Triphenyl phosphate	115-86-6	30 - 45

Only hazardous components are listed above

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## 4. First-aid measures

<b>Eye contact</b>	Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.
<b>Skin contact</b>	Remove contaminated clothing. Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before reuse. Get medical attention if irritation persists.
<b>Inhalation</b>	In case of mist inhalation or breathing fumes released from heated material, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.
<b>Ingestion</b>	If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately. ----- NOTE: Never give an unconscious person anything to drink -----

### Most important symptoms and effects, acute or delayed

None known

<b>Notes to the physician</b>	Treat symptomatically and supportively. No specific antidote.
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## 5. Fire - fighting measures

<b>Suitable extinguishing media</b>	Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.
<b>Unusual fire and explosion hazards</b>	When heated to decomposition, may release poisonous and corrosive fumes of carbon dioxide, carbon monoxide and phosphorus oxides, The material is not sensitive to ignition from static discharge
<b>Fire fighting procedure</b>	Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Contain runoff to prevent entry into water or drainage systems.

## 6. Accidental release measures

<b>Personal precautions</b>	Wear appropriate safety clothing and eye/face protection (see Section 8)
<b>Methods for cleaning up</b>	Soak up with sand or other suitable absorbent and dispose of as solid waste. Collect in suitable and properly labeled containers. Ventilate area and wash spill site after material pickup is complete.
<b>Environmental precautions</b>	Prevent product from entering drains, ditches and rivers.

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## 7. Handling and storage

**Handling** Avoid bodily contact. Keep containers tightly closed.

**Storage** Store in a dry, cool, well-ventilated area away from incompatible materials (see "materials to avoid"). Crystallizes at temperatures below 4.4°C (40°F). Maximum recommended storage temperature of 65°C (149°F)

## 8. Exposure controls / personal protection

Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
Triphenyl phosphate 115-86-6	3 mg/m <sup>3</sup>	3 mg/m <sup>3</sup>

**Ventilation requirements** Ventilation must be sufficient to maintain atmospheric concentration below recommended exposure limit.

**Personal protective equipment:**

- **Respiratory protection** In case of insufficient ventilation wear suitable respiratory equipment.
- **Hand protection** Chemical safety gloves
- **Eye protection** Chemical splash goggles and/or face shield if splash hazard exists
- **Skin and body protection** Body covering clothes and boots

**Hygiene measures** Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

## 9. Physical and chemical properties

**Appearance** Clear, transparent liquid  
**Odor** None.  
**pH** Not applicable  
**Melting point/range** Not determined  
**Boiling point/range** Not determined  
**Flash point** Not flammable  
**Evaporation rate (ether=1)** Not available  
**Flammable/Explosion limits** Not flammable/Not explosive  
**Vapor pressure** Not determined  
**Vapor density** Not available  
**Solubility:**  
- **Solubility in water** Not available  
**Partition coefficient (n-octanol/water)** Not determined  
**Auto-ignition temperature** Not self-ignitable  
**Decomposition temperature** >240°C  
**Viscosity** 48 mPa.s (25°C)

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<b>Specific gravity</b>	1.154
<b>Explosive properties</b>	Not explosive
<b>Oxidising properties</b>	No oxidising properties can be predicted on the basis of chemical structure

## 10. Stability and reactivity

<b>Reactivity</b>	No reactive hazards known/expected.
<b>Stability</b>	Stable under normal conditions
<b>Possibility of hazardous reactions</b>	Not expected to occur
<b>Conditions to avoid</b>	Heating above decomposition temperature. Exposure to moisture.
<b>Materials to avoid</b>	Strong oxidizers, strong acids and strong alkalis. It hydrolyzes slowly at normal temperatures in acidic or alkaline aqueous solutions.
<b>Hazardous decomposition products</b>	Carbon dioxide and carbon monoxide Phosphorus oxides

## 11. Toxicological information

<b>Note:</b>	<i>Toxicological data have not been determined specifically for this product. Information given is based on data on the components</i>
<b>Acute toxicity:</b>	
- Rat oral LD50	> 5000 mg/kg
- Rabbit dermal LD50	> 2000 mg/kg
- Rat inhalation LC50	> 0.4 mg/l
- Dermal irritation (rabbit)	Not irritant
- Eye irritation (rabbit)	Not irritant
<b>Mutagenicity</b>	No evidence of genotoxic or mutagenic activity was noted in Ames tests, the mouse lymphoma and chromosome aberration tests.
<b>Carcinogenicity</b>	Not classified by IARC Not included in NTP 13th Report on Carcinogens Not classified as a carcinogen by USA OSHA
<b>Reproductive toxicity</b>	No adverse effect were observed on fertility and/or on the development
<b>Teratogenicity</b>	Not teratogenic when administered orally up to 1000 mg/kg
<b>Specific Target Organ Toxicity (STOT) - Single exposure</b>	No effects on specific target organs have been identified
<b>Specific Target Organ Toxicity (STOT) - Repeat exposure</b>	No effects on specific target organs have been identified
<b>Aspiration hazard</b>	Not expected to occur

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**Neurotoxicity** No signs of acute delayed neurotoxicity when administered orally to hens.

## 12. Ecological information

**Note:** Ecological data have not been determined specifically for this product. Information given is based on data on the components and the ecotoxicology of similar products.

### Aquatic toxicity :

- 96 Hour-LC50, Fish 0.8 mg/l (Ictalurus punctatus)

- 48 Hour-EC50, Daphnia magna 202 µg/L

**Biodegradation** Readily biodegradable

**Bioaccumulative potential** May bioaccumulate

**Note:** Not considered to be PBT or vPvB

## 13. Disposal considerations

**Waste disposal** Observe all federal, state and local environmental regulations when disposing of this material.

**Disposal of Packaging** Dispose of in a safe manner in accordance with local/national regulations.

## 14. Transportation information

**UN No.** 3082

**DOT** Proper shipping name: Environmentally hazardous substances, liquid , n.o.s (Triphenyl phosphate)  
Class: 9 - Miscellaneous Hazardous Materials  
Labels: 9  
Packing Group: III

Not regulated for surface and air transport in non-bulk (<119 gallons) packagings. (contains triphenyl phosphate which is a Marine Pollutant per 49CFR 172.101 Appendix B)

**IMDG** Proper shipping name: Environmentally hazardous substance, liquid, n.o.s (contains triphenyl phosphate)  
Class: 9 - Miscellaneous Dangerous Substances and Articles  
Labels: 9  
Mark: MARINE POLLUTANT  
Packing Group: III

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<b>ICAO/IATA</b>	Proper shipping name: Environmentally hazardous substance, liquid , n.o.s (triphenyl phosphate) Class: 9 Hazard label(s): Miscellaneous Packing group: III Marking: Environmentally hazardous
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## 15. Regulatory information

<b>USA</b>	Reported in the EPA TSCA Inventory.
<b>- SARA 313</b>	This product does not contain a chemical listed at or above de minimis concentrations
<b>- Massachusetts Right-to-Know Hazardous Substances list</b>	Listed (Triphenyl phosphate)
<b>- New Jersey Right-to-Know Hazardous Substances list</b>	Listed (Triphenyl phosphate)
<b>- Pennsylvania Right-to-Know Hazardous Substances list</b>	Listed (Triphenyl phosphate)
<b>- Rhode Island Right-to-Know Hazardous Substances list</b>	Listed (Triphenyl phosphate)
<b>- California-Prop 65</b>	This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the State drinking Water and Toxic Enforcement Act of 1986.
<b>- Waste Classifications</b>	This material does not meet RCRA`s characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40CFR 261.33.
<b>Canada</b>	Listed in DSL
<b>EU</b>	Reported in EINECS
<b>Japan</b>	Listed in ENCS
<b>Australia</b>	Listed in AICS
<b>New Zealand Inventory</b>	Listed in NZIoC
<b>- China inventory</b>	Listed in IECSC
<b>Korea</b>	Listed in ECL
<b>Taiwan</b>	Listed
<b>Philippines</b>	Listed in PICCS

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## 16. Other information

### Health, Safety & Environment Policy

We will strive to ensure that our operations and products meet the needs of the present global community without compromising the ability of future generations to meet their needs. We accept that the success of our business is dependent on the supply of products and services that will benefit society whilst ensuring human safety and protection of the environment and natural resources. Within the framework of our commitment to the Responsible Care program, we will provide a healthy and safe work environment for employees and will responsibly manage our products at all stages of their life cycle in order to protect human health and the environment whilst maintaining high production standards of operation.

**TO MEET THIS COMMITMENT WE WILL:** Comply with or exceed applicable national and international regulatory requirements and other requirements to which we subscribe. Communicate openly and actively encourage dialogue with employees, customers and community concerning our products and operations. Implement documented management systems consistent with and for promotion of the Responsible Care ethics.

Develop and supply products that can be manufactured, transported, used and disposed of safely whilst best meeting the needs of our customers. Regularly assess, continually improve and responsibly manage health, safety and environmental risks associated with products and processes throughout their life-cycles. Share knowledge and expertise with others and seek to learn from and incorporate improved practices into our own operations.

Educate and train employees, contractors and customers to improve their HSE performance. Communicate up-to-date information to enable our workers, customers and other interested parties to handle our products in a safe and environmentally responsible manner. Endeavor to work with customers, suppliers, distributors and contractors to foster the safe use, transport and disposal of our chemicals. Support Product Stewardship programs in cooperation with customers, distributors and transporters.

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, ICL-IP America Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use. In no event will ICL-IP America Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE, ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

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**End of safety data sheet**