

PONDCARE POWERPAKS

Chemwatch Material Safety Data Sheet
Mar-6-2008
NB293ECP

CHEMWATCH 02-1387
Version No:1
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Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

PONDCARE POWERPAKS

STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

SUPPLIER

Company: Mars Fishcare North America Inc
Address:
PO Box 218
Chalfont
PA, 18914- 0218
USA
Telephone: +1 215 822 8181
Emergency Tel: +1800 222 1222 (US Only)

Company: Mars Fishcare North America Inc
Address:
50 East Hamilton Street
Chalfont
PA, 18914
USA
Telephone: +1 215 822 8181
Fax: +1 215 822 1906

PRODUCT USE

Used according to manufacturer' s directions. For product 246.

Section 2 - HAZARDS IDENTIFICATION

CANADIAN WHMIS SYMBOLS

None

EMERGENCY OVERVIEW

RISK

Harmful to aquatic organisms.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

The material has NOT been classified as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality (death) rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, unintentional ingestion is not thought to be cause for concern.

EYE

There is some evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.

SKIN

There is some evidence to suggest that the material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterized by redness,

continued...

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Section 2 - HAZARDS IDENTIFICATION

swelling and blistering.

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

CHRONIC HEALTH EFFECTS

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
sodium chloride	7647-14-5	35-40
sodium bicarbonate	144-55-8	30-35
citric acid	77-92-9	10-15
barley		10-15
starch	9005-25-8	5-10

Section 4 - FIRST AID MEASURES

SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

EYE

If this product comes in contact with the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- If pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin contact occurs:

- Immediately remove all contaminated clothing, including footwear
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

NOTES TO PHYSICIAN

Treat symptomatically.

continued...

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Section 5 - FIRE FIGHTING MEASURES

Flash Point (°F): Not Applicable
Lower Explosive Limit (%): Not Applicable
Upper Explosive Limit (%): Not Applicable
Autoignition Temp (°F): Not Applicable

EXTINGUISHING MEDIA

· There is no restriction on the type of extinguisher which may be used.
Use extinguishing media suitable for surrounding area.

FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Non combustible.
- Not considered to be a significant fire risk, however containers may burn.
Decomposition may produce toxic fumes of: carbon dioxide (CO₂), hydrogen chloride, phosgene, other pyrolysis products typical of burning organic material.
May emit poisonous fumes.
May emit corrosive fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:
Safety Glasses.
Chemical goggles.
Gloves:
PVC chemical resistant type.
Respirator:

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Wear impervious gloves and safety goggles.
- Trowel up/scrape up.
- Place spilled material in clean, dry, sealed container.
- Flush spill area with water.

MAJOR SPILLS

- Minor hazard.
- Clear area of personnel.
 - Alert Emergency Responders and tell them location and nature of hazard.
 - Control personal contact by using protective equipment as required.
 - Prevent spillage from entering drains or water ways.

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Section 6 - ACCIDENTAL RELEASE MEASURES

- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labeled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.
- Wash area and prevent runoff into drains or waterways.
- If contamination of drains or waterways occurs, advise emergency services.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- DO NOT allow material to contact humans, exposed food or food utensils.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

RECOMMENDED STORAGE METHODS

- Polyethylene or polypropylene container.
- Packing as recommended by manufacturer
- Check all containers are clearly labeled and free from leaks.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

US OSHA Permissible Exposure Levels (PELs)											
Z	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³	Max excursion ppm	Max excursion mg/m ³	Max excursion duration (mins)	TWA F/CC
Z3	Inert or Nuisance	15	5								

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Z	US OSHA Permissible Exposure Levels (PELs) Material	TWA		STEL		Peak		Max excursion ppm	Max excursion mg/m ³	Max excursion duration (mins)	TWA F/CC
		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³				
Z3	Dust: (d) Respirable fraction Inert or Nuisance Dust: (d) Total dust	50	15								
Z3	Inert or Nuisance Dust: (d) Respirable fraction	15	5								
Z3	Inert or Nuisance Dust: (d) Total dust	50	15								
Z3	Inert or Nuisance Dust: (d) Respirable fraction	15	5								
Z3	Inert or Nuisance Dust: (d) Total dust	50	15								
Z1	Starch - Total dust		15								
Z1	Starch - Respirable fraction		5								

Source	Material	TWA ppm	TWA mg/m ³	STEL mg/m ³
US OSHA Permissible Exposure Levels (PELs) - Table Z3	sodium chloride (Inert or Nuisance Dust: (d) Total dust)	50	15	
US OSHA Permissible Exposure Levels (PELs) - Table Z3	sodium chloride (Inert or Nuisance Dust: (d) Respirable fraction)	15	5	
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	sodium chloride (Respirable size+)		3	6
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	sodium chloride (Particulates, NOC++)		10	20
US - Michigan Exposure Limits for Air Contaminants	sodium chloride (Particulates not otherwise regulated, Respirable dust)		5	
US OSHA Permissible Exposure Levels (PELs) - Table Z3	sodium bicarbonate (Inert or Nuisance Dust: (d) Total dust)	50	15	
US OSHA Permissible Exposure Levels (PELs) - Table Z3	sodium bicarbonate (Inert or Nuisance Dust: (d) Respirable fraction)	15	5	
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	sodium bicarbonate (Respirable size+)		3	6
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	sodium bicarbonate		10	20

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m ³	STEL mg/m ³
Occupational Health and Safety Regulations - Contamination Limits	(Particulates, NOC++)			
US - Michigan Exposure Limits for Air Contaminants	sodium bicarbonate (Particulates not otherwise regulated, Respirable dust)		5	
US OSHA Permissible Exposure Levels (PELs) - Table Z3	citric acid (Inert or Nuisance Dust: (d) Total dust)	50	15	
US OSHA Permissible Exposure Levels (PELs) - Table Z3	citric acid (Inert or Nuisance Dust: (d) Respirable fraction)	15	5	
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	citric acid (Respirable size+)		3	6
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	citric acid (Particulates, NOC++)		10	20
US - Michigan Exposure Limits for Air Contaminants	citric acid (Particulates not otherwise regulated, Respirable dust)		5	
Canada - Quebec Occupational Exposure Limits (French)	starch (Amidon)		10	
US - Minnesota Permissible Exposure Limits (PELs)	starch (Starch - Total dust)		15	
US - Minnesota Permissible Exposure Limits (PELs)	starch (Starch - Respirable fraction)		5	
Canada - Ontario Occupational Exposure Limits	starch (Starch (total dust))		10	
US NIOSH Recommended Exposure Limits (RELs)	starch (Starch)		10	
Canada - Alberta Occupational Exposure Limits	starch (Starch)		10	
Canada - British Columbia Occupational Exposure Limits	starch (Starch)		10	
US - Idaho - Limits for Air Contaminants	starch (Starch Total dust)		15	
US - Vermont Permissible Exposure Limits Table Z- 1- A Transitional Limits for Air Contaminants	starch (Starch - Respirable fraction)		5	
US - Vermont Permissible Exposure Limits Table Z- 1- A Final Rule Limits for Air Contaminants	starch (Starch - Total dust)		15	
US - Vermont Permissible Exposure Limits Table Z- 1- A Final Rule Limits for Air Contaminants	starch (Starch - Respirable fraction)		5	
US - Vermont Permissible Exposure Limits Table Z- 1- A Transitional Limits for Air Contaminants	starch (Starch - Total dust)		15	
US - Idaho - Limits for Air	starch (Starch Respirable		5	

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Source	Material	TWA ppm	TWA mg/m ³	STEL mg/m ³
Contaminants	fraction)			
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	starch (Starch - Total dust)		15	
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	starch (Starch - Respirable fraction)		5	
US NIOSH Recommended Exposure Limits (RELs)	starch (Starch)		5	
US - Hawaii Air Contaminant Limits	starch (Starch - Total dust)		10	20
US - Hawaii Air Contaminant Limits	starch (Starch - Respirable fraction)		5	
US - Michigan Exposure Limits for Air Contaminants	starch (Starch, Respirable dust)		5	
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	starch (Starch)		10	20
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	starch (Starch)		(See Table 11)	
US - Washington Permissible exposure limits of air contaminants	starch (Starch - Total particulate)		10	20
US - Washington Permissible exposure limits of air contaminants	starch (Starch - Respirable fraction)		5	10
US - Michigan Exposure Limits for Air Contaminants	starch (Starch, Total dust)		15	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	starch (Starch - Total dust)		15	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	starch (Starch - Respirable fraction)		5	
US ACGIH Threshold Limit Values (TLV)	starch (Starch)		10	
US - Oregon Permissible Exposure Limits	starch (Starch - Respirable Fraction)		5	
US - Oregon Permissible Exposure Limits	starch (Starch - Total Dust)		10	

MATERIAL DATA

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

INGREDIENT DATA

SODIUM CHLORIDE:

STARCH:

Sensory irritants are chemicals that produce temporary and undesirable side-effects on the eyes, nose or throat. Historically occupational exposure standards for these irritants have been based on observation of workers' responses to various airborne concentrations. Present day expectations require that nearly every individual should be protected against even minor sensory irritation and exposure standards are established using uncertainty factors or safety factors of 5 to 10 or more. On occasion animal no-observable-effect-levels (NOEL) are used to determine these limits where human results are unavailable. An additional approach, typically used by the TLV committee (USA) in determining respiratory standards for this group of chemicals, has been to assign ceiling values (TLV C) to rapidly acting irritants and to assign short-term exposure limits (TLV STELs) when the weight of evidence from irritation, bioaccumulation and other endpoints combine to warrant such a limit. In contrast the MAK Commission (Germany) uses a five-category system based on intensive odour, local irritation, and elimination half-life. However this system is being replaced to be consistent with the European Union (EU) Scientific Committee for Occupational Exposure Limits (SCOEL); this is more closely allied to that of the USA.

OSHA (USA) concluded that exposure to sensory irritants can:

- cause inflammation
- cause increased susceptibility to other irritants and infectious agents
- lead to permanent injury or dysfunction
- permit greater absorption of hazardous substances and
- acclimate the worker to the irritant warning properties of these substances thus increasing the risk of overexposure.

CITRIC ACID:

SODIUM BICARBONATE:

SODIUM CHLORIDE:

It is the goal of the ACGIH (and other Agencies) to recommend TLVs (or their equivalent) for all substances for which there is evidence of health effects at airborne concentrations encountered in the workplace.

At this time no TLV has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as is practically possible and occupational exposure must be kept to a minimum.

NOTE: The ACGIH occupational exposure standard for Particles Not Otherwise Specified (P.N.O.S) does NOT apply.

STARCH:

The only adverse health effect associated with occupational exposure to starch is a mild dermatitis. The TLV-TWA is identical to a "nuisances-dust" value.

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

EYE

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. DO NOT wear contact lenses.

HANDS/FEET

Wear chemical protective gloves, eg. PVC.
Wear safety footwear or safety gumboots, eg. Rubber.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

ENGINEERING CONTROLS

General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in specific circumstances. If risk of overexposure exists, wear an approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Does not mix with water.

Molecular Weight: Not Applicable
Melting Range (°F): Not Available
Solubility in water (g/L): Immiscible
pH (1% solution): Not Applicable
Volatile Component (%vol): Not Applicable
Relative Vapor Density (air=1): Not Applicable
Lower Explosive Limit (%): Not Applicable
Autoignition Temp (°F): Not Applicable
State: Non Slump Paste

Boiling Range (°F): Not Applicable
Specific Gravity (water= 1): Not Available
pH (as supplied): Not Applicable
Vapour Pressure (mmHG): Not Applicable
Evaporation Rate: Not Applicable
Flash Point (°F): Not Applicable

Upper Explosive Limit (%): Not Applicable
Decomposition Temp (°F): Not Available
Viscosity: Not Applicable

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Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Tan free flowing powder with an earthy odour; insoluble in water.

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

Presence of incompatible materials.

Product is considered stable and hazardous polymerization will not occur.

STORAGE INCOMPATIBILITY

Avoid strong acids.

Avoid reaction with oxidizing agents.

Section 11 - TOXICOLOGICAL INFORMATION

PondCare PowerPaks

TOXICITY AND IRRITATION

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

SODIUM CHLORIDE:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD50: 3000 mg/kg

Oral (human) TDLo: 12357 mg/kg/23d

Intravenous (Mouse) LD50: 645 mg/kg

Oral (Human) TDLo: 12357 mg/kg

Subcutaneous (Rat) LD: 3500 mg/kg

Intraperitoneal (Mouse) LD50: 2602 mg/kg

Intravenous (Rabbit) LD: 1100 mg/kg

Subcutaneous (Guinea) pig: LD 2160 mg/kg

Intravenous (Guinea) pig: LD 300 mg/kg

Intraperitoneal (Rat) LD50: 2600 mg/kg

The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

Oral Lowest Toxic Dose (Human): 8.2 mg/kg Eye (rabbit):100 mg/24h - moderate

SODIUM BICARBONATE:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (human- infant) TDLo: 1260 mg/kg

Oral (rat) LD50: 4220 mg/kg

IRRITATION

Skin (rabbit): 500 mg/24h - Mild

Eye (rabbit): 10 mg - Moderate

Skin : Mild

Eye : Moderate

IRRITATION

Skin (human): 30 mg/3d- I- Mild

Eye (rabbit): 100 mg rinse - Mild

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Section 11 - TOXICOLOGICAL INFORMATION

Oral (man) TDL_o: 14432 mg/kg [RTECS]

CITRIC ACID:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Oral (rat) LD₅₀: 3000 mg/kg

IRRITATION

Skin (rabbit): 500 mg/24h - Mild

Eye (rabbit): 0.75 mg/24h- SEVERE

STARCH:

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

TOXICITY

Intraperitoneal (Mouse) LD₅₀: 6600 mg/kg

IRRITATION

Skin (human): 0.3 mg/3d- I Mild

The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

MATERIAL	CARCINOGEN	SENSITIZER	SKIN	MUTAGEN	REPROTOXIN
----------	------------	------------	------	---------	------------

starch	ACGIH:A4				
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CARCINOGEN

ACGIH: starch: A4

Section 12 - ECOLOGICAL INFORMATION

DO NOT discharge into sewer or waterways.

Refer to data for ingredients, which follows:

SODIUM CHLORIDE:

DO NOT discharge into sewer or waterways.

TL_m 96 > 1000 ppm

CITRIC ACID:

Algae IC₅₀ (72hr.) (mg/l): 80

log Pow (Verschuereen 1983): - 1.72

DO NOT discharge into sewer or waterways.

Biodegradable in a waste treatment facility

log K_{ow}: -1.72

BOD 5 if unstated: 0.42

ThOD: 0.686

Toxicity Fish: LC₅₀>100mg/L

Effects on algae and plankton: inhib. algae 100mg/L

STARCH:

ThOD: 1.18

Sugar-based compounds (saccharides), including polysaccharides are generally easily decomposed by biodegradation. Not all polysaccharides decompose with equal rapidity, and polysaccharides are also synthesised by microorganisms during, for example, the compost maturation phases. Water-insoluble species such as cellulose take longer to decompose and those with a significant degree of branching also take longer.

DO NOT discharge into sewer or waterways.

ThOD: 1.18

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Section 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult Waste Management Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorized landfill.

Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:UN, IATA,
IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

PondCare PowerPaks (CAS: None):
No regulations applicable

sodium chloride (CAS: 7647-14-5) is found on the following regulatory lists;
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits
Canada Domestic Substances List (DSL)
OECD Representative List of High Production Volume (HPV) Chemicals
US - Michigan Exposure Limits for Air Contaminants
US - North Carolina Permissible Exposure Limits (PELs) for Air Contaminants
US DOE Temporary Emergency Exposure Limits (TEELs)
US Food Additive Database
US OSHA Permissible Exposure Levels (PELs) - Table Z3
US Toxic Substances Control Act (TSCA) - Inventory

sodium bicarbonate (CAS: 144-55-8) is found on the following regulatory lists;
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits
Canada Domestic Substances List (DSL)
CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP
IMO Provisional Categorization of Liquid Substances
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals
US - Michigan Exposure Limits for Air Contaminants
US - North Carolina Permissible Exposure Limits (PELs) for Air Contaminants
US Cosmetic Ingredient Review (CIR) Cosmetic ingredients found safe as used
US DOE Temporary Emergency Exposure Limits (TEELs)
US EPA High Production Volume Chemicals Additional List
US Food Additive Database
US OSHA Permissible Exposure Levels (PELs) - Table Z3
US Toxic Substances Control Act (TSCA) - Inventory

citric acid (CAS: 77-92-9) is found on the following regulatory lists;
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits
Canada Domestic Substances List (DSL)
Canada Ingredient Disclosure List (SOR/88-64)
CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP
IMO IBC Code Chapter 17: Summary of minimum requirements
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals
US - Michigan Exposure Limits for Air Contaminants
US - North Carolina Permissible Exposure Limits (PELs) for Air Contaminants
US DOE Temporary Emergency Exposure Limits (TEELs)
US EPA High Production Volume Program Chemical List
US Food Additive Database
US OSHA Permissible Exposure Levels (PELs) - Table Z3
US Toxic Substances Control Act (TSCA) - Inventory

starch (CAS: 9005-25-8) is found on the following regulatory lists;
Canada - Alberta Occupational Exposure Limits
Canada - British Columbia Occupational Exposure Limits
Canada - Ontario Occupational Exposure Limits
Canada - Quebec Occupational Exposure Limits (French)
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits

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Section 15 - REGULATORY INFORMATION

Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances
Canada Domestic Substances List (DSL)
International Air Transport Association (IATA) Dangerous Goods Regulations
US - Hawaii Air Contaminant Limits
US - Idaho - Limits for Air Contaminants
US - Michigan Exposure Limits for Air Contaminants
US - Minnesota Hazardous Substance List
US - Minnesota Permissible Exposure Limits (PELs)
US - North Carolina Permissible Exposure Limits (PELs) for Air Contaminants
US - Oregon Permissible Exposure Limits
US - Rhode Island Hazardous Substance List
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
US - Washington Permissible exposure limits of air contaminants
US ACGIH Carcinogens Listing
US ACGIH Threshold Limit Values (TLV)
US Cosmetic Ingredient Review (CIR) Cosmetic ingredients found safe as used
US DOE Temporary Emergency Exposure Limits (TEELs)
US Food Additive Database
US NFPA 499 Combustible Dusts
US NIOSH Recommended Exposure Limits (RELs)
US OSHA Permissible Exposure Levels (PELs) - Table Z1
US Toxic Substances Control Act (TSCA) - Inventory

Section 16 - OTHER INFORMATION

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Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following U.S. Regulations and Standards:

OSHA Standards - 29 CFR:

1910.132 - Personal Protective Equipment - General requirements

1910.133 - Eye and face protection

1910.134 - Respiratory Protection

1910.136 - Occupational foot protection

1910.138 - Hand Protection

Eye and face protection - ANSI Z87.1

Foot protection - ANSI Z41

Respirators must be NIOSH approved.

For detailed advice on Personal Protective Equipment, refer to the following Canadian Standards:

CAN/CSA-Z195 - Protective Footwear

Z195.1 - Guideline on Selection, Use, and Care of Protective Footwear

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Section 16 - OTHER INFORMATION

CAN/CSA-Z94.3 - Industrial Eye and Face Protectors
Z94.3.1 - Protective Eyewear User's Guide
CSA-Z94.4 - Selection, Use, and Care of Respirators
CAN/CSA-Z180.1 - Compressed Breathing Air and Systems.

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