

MATERIAL SAFETY DATA SHEET



PERMA-GARD 3028

HMIS		NFPA	Personal protective equipment			
Health	3	3				
Fire Hazard	0	0				
Reactivity	0	0				

Version Number: 1

Preparation date: 2005-06-17

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: PERMA-GARD 3028

MSDS #: 11551_HX

Product code: 11551330, 11551470, 11551150

Recommended use: Zinc Phosphatizer.

Manufacturer, importer, supplier:
 JohnsonDiversey, Inc.
 3630 E. Kemper Rd.
 Cincinnati, OH 45241
 Phone: 1-800-438-2647

Canadian Headquarters
 JohnsonDiversey - Canada, Inc.
 2401 Bristol Circle
 Oakville, Ontario L6H 6P1
 Phone: 1-800-668-3131

Emergency telephone number: 1-800-851-7145 (Prosar); 1-651-917-6133 (Int'l Prosar); 01-800-710-3400 (México)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER. CORROSIVE. CAUSES EYE AND SKIN BURNS . HARMFUL OR FATAL IF SWALLOWED. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. HARMFUL IF INHALED .

Principle routes of exposure: Skin contact. Skin Absorption. Eye contact. Ingestion. Inhalation.

Skin contact: Corrosive. May cause permanent damage. Skin contact may cause allergic reactions in some individuals .

Eye contact: Corrosive. Causes permanent eye damage, including blindness.

Inhalation: May cause irritation and corrosive effects to nose, throat and respiratory tract. Persons with pre-existing respiratory conditions should be particularly careful about possible respiratory effects .

Ingestion: Corrosive. Causes burns to mouth, throat and stomach. Contains fluoride compounds . Can cause hypocalcemia resulting in possibly fatal, delayed ventricular fibrillation. Ingestion of large amounts may cause poisoning.

Symptoms include: methemoglobinemia, cyanosis (blue skin), marked fall in blood pressure, leading to collapse, coma and possibly death.

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Ingredient	CAS #	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phosphoric acid	7664-38-2	10 - 20%	1.25 g/kg (rat)	2740 mg/kg (rabbit)	25.5 mg/m ³ (rat)
Nitric acid	7697-37-2	5 - 10%	90 ml/kg (rat)	Not available	130 mg/m ³ (rat)
Hydrofluoric acid	7664-39-3	0.1 - 1.0%	15.2 mg/kg (rat)	Not available	1276 ppm/1H (rat)
Nickel nitrate	13138-45-9	1 - 5%	1620 mg/kg (rat)	Not available	Not available

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

Skin contact: Flush immediately with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation: If breathing is affected, remove to fresh air. Get medical attention immediately.

Ingestion: Do not induce vomiting. Immediately drink one cupful of water or milk. Never give anything by mouth to an unconscious person. Can cause hypocalcemia resulting in possibly fatal, delayed ventricular fibrillation. Get medical attention immediately.

Aggravated Medical Conditions: Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects .

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, water spray, foam, carbon dioxide.
Specific hazards: Thermal decomposition can lead to release of irritating gases and vapors.
Unusual hazards: Corrosive material (See sections 8 and 10).
Specific methods: No special methods required

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Extinguishing media which must not be used for safety reasons: No information available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment
Environmental precautions and clean-up methods: Clean-up methods - large spillage. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.

7. HANDLING AND STORAGE

Handling:

Avoid contact with skin, eyes and clothing. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Remove and wash contaminated clothing and footwear before re-use. Wash thoroughly after handling. Do not mix with any other product or chemical . Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

Storage:

Keep tightly closed in a dry, cool and well-ventilated place. Protect from freezing . Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:

General room ventilation plus local exhaust should be used to minimize exposure to vapors . In case of insufficient ventilation wear suitable respiratory equipment..

Personal Protective Equipment

Eye protection: Chemical splash goggles.
Hand protection: Chemical resistant gloves.
Skin and body protection: If major exposure is possible, wear suitable protective clothing and footwear.
Respiratory protection: If aerosols, mists, or vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over-exposure . A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice

Ingredient	CAS #	ACGIH	OSHA	Mexico
Phosphoric acid	7664-38-2	3 mg/m ³ (STEL) 1 mg/m ³ (TWA)	1 mg/m ³	3 mg/m ³ (STEL) 1 mg/m ³ (TWA)
Nitric acid	7697-37-2	4 ppm (STEL) 2 ppm (TWA)	5 mg/m ³ 2 ppm	10 mg/m ³ (STEL) 5 mg/m ³ (TWA)
Hydrofluoric acid	7664-39-3	2 ppm (Ceiling) 0.5 ppm (TWA) 2.5 mg/m ³ (TWA)	2.5 mg/m ³ F ₋	2.5 mg/m ³ (Ceiling) 2.5 mg/m ³ (TWA)
Nickel nitrate	13138-45-9	0.2 mg/m ³ (TWA) 0.1 mg/m ³ (TWA)	1 mg/m ³ Ni	0.3 mg/m ³ (STEL) 0.1 mg/m ³ (TWA)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Green
Odor: No information available
Specific gravity: 1.379 g/cc
Dilution pH: 3 (1%)
Bulk density: No information available
Vapor density: No information available
Evaporation rate: No information available
Solubility in other solvents: No information available

Viscosity: No information available

Partition coefficient (n-octanol/water): No information available

Appearance: Aqueous solution
Boiling point/range: Not determined
Melting point/range: Not determined
pH: 1.7
Density: No information available
Decomposition temperature: Not determined
Autoignition temperature: No information available
Solubility: Soluble
VOC: 0%

Flash point: >200 (°F) >93.3 (°C)

10. STABILITY AND REACTIVITY

Stability:	The product is stable
Polymerization:	Hazardous polymerisation does not occur
Hazardous decomposition products:	Oxides of phosphorus . Nitrogen oxides (NOx) .
Materials to avoid:	Do not mix with chlorinated products . Incompatible with bases.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Corrosive , Oral, LD50 estimated to be between 500 - 5000 mg/kg , Causes liver, kidney, blood ,and CNS effects .
Component Information:	See Section 3
Chronic toxicity:	Repeated exposure to high levels of fluoride through ingestion, inhalation, [or dermal absorption- if posing a skin absorption hazard] can cause fluorosis. The primary target is the skeletal system. Effects can include osteoporosis, increased bone density, mottled tooth enamel, and calcification of ligaments . Prolonged or repeated skin contact may cause allergic reactions in some individuals . Can cause cancer . Cancer risk depends on duration and level of exposure .
Specific effects	
Carcinogenic effects:	No information available.
Mutagenic effects:	None known
Reproductive toxicity:	None known
Target organ effects:	Nickel is toxic to the lung, liver, and kidney .

HAZARDOUS COMPONENTS

Ingredient	CAS #	NTP	IARC	OSHA
Nickel nitrate	13138-45-9	Listed.	Listed.	

12. ECOLOGICAL INFORMATION

Environmental Information:	When used for its intended purpose this product should not cause adverse effects in the environment
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13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Dispose of according to all federal, state and local applicable regulations . Undiluted product is regulated under environmental and transportation laws as a corrosive waste .

RCRA Hazard Class: D002

14. TRANSPORT INFORMATION

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information

15. REGULATORY INFORMATION

International Inventories

All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (ECL), Japan (ENCS), Philippines (PICCS), China (IECSC).

U.S. Regulations

California Proposition 65: This product contains materials listed under California's Proposition 65.

STATE RIGHT TO KNOW

Ingredient	CAS #	MARTK:	NJRTK:	PARTK:	RIRTK:	ILRTK:	CTRTK:
Phosphoric acid	7664-38-2	Listed	Listed	Listed	Listed	Listed	Listed
Water	7732-18-5	-	-	-	-	-	-
Nitric acid	7697-37-2	Listed	-	Listed	Listed	Listed	Listed
Zinc phosphate	7779-90-0	-	-	-	-	Listed	Listed
Hydrofluoric acid	7664-39-3	Listed	-	-	-	Listed	-
Zinc nitrate	7779-88-6	Listed	-	Listed	-	Listed	Listed
Nickel nitrate	13138-45-9	Listed	-	Listed	Listed	Listed	Listed

CERCLA / SARA

Ingredient	CAS #	Weight %	CERCLA/SARA RQ (lbs)	Section 302 TPQ (lbs)	Section 313
Phosphoric acid	7664-38-2	10 - 20%	5000		
Nitric acid	7697-37-2	5 - 10%	1000	1000	Listed.
Zinc phosphate	7779-90-0	5 - 10%			Listed.
Hydrofluoric acid	7664-39-3	0.1 - 1.5%	100	100	Listed.
Zinc nitrate	7779-88-6	1 - 5%	1000		Listed.

Nickel nitrate	13138-45-9	1 - 5%	100		Listed.
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Ingredient	CAA HAP	CAA ODS	CWA Priority Pollutants
Zinc phosphate			Listed.
Hydrofluoric acid	Listed.		
Zinc nitrate			Listed.
Nickel nitrate	Listed.		Listed.

SARA 311/312 Hazard Categories

Immediate: Y
 Delayed: Y
 Fire: N
 Reactivity: N
 Sudden Release of Pressure: N

Canada

WHMIS hazard class: E Corrosive material , D2A Very toxic materials .



Ingredient	CAS #	NPRI
Nitric acid	7697-37-2	Listed
Zinc phosphate	7779-90-0	Listed
Hydrofluoric acid	7664-39-3	Listed
Zinc nitrate	7779-88-6	Listed
Nickel nitrate	13138-45-9	Listed

16. OTHER INFORMATION

Reason for revision: Not applicable
 Prepared by: NAPRAC
 Additional advice: None

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