

# Material Safety Data Sheet



Date of issue 28 March 2017

Version 32.02

## 1. Product and company identification

**Product name** : Metal Conditioner

**Code** : DX520

**Manufacturer / Supplier** : Pretreatment and Specialty Products  
23000 St. Clair Avenue  
Euclid, OH 44117

**Emergency telephone number** : (412) 434-4515 (U.S.)  
(514) 645-1320 (Canada)  
01-800-00-21-400 (Mexico)

**Technical Phone Number** : 1-800-627-6015 (PPG PRETREATMENT & SPECIALTY PRODUCTS)  
8:00 a.m. - 5:00 p.m. EST

## 2. Hazards identification

**Emergency overview** : DANGER!

CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY REACTION. MAY BE HARMFUL IF INHALED OR SWALLOWED. SANDING AND GRINDING DUSTS MAY BE HARMFUL IF INHALED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. CANCER HAZARD - CONTAINS MATERIAL WHICH CAN CAUSE CANCER. Add this product only to water. Never add water to this product.

Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

### **Potential acute health effects**

**Inhalation** : May be harmful if inhaled. Irritating to respiratory system. Can irritate eyes, nose, mouth and throat. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Ingestion** : May be harmful if swallowed. May cause burns to mouth, throat and stomach.

**Skin** : Corrosive to the skin. Causes burns.

**Eyes** : Corrosive to eyes. Causes burns.

### **Over-exposure signs/symptoms**

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
wheezing and breathing difficulties  
asthma

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

**Skin** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur

**Eyes** : Adverse symptoms may include the following:  
pain  
watering  
redness

## 2. Hazards identification

**Medical conditions aggravated by over-exposure** : Pre-existing respiratory disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS).

See toxicological information (Section 11)

## 3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% (w/w)</u>
zinc bis(dihydrogen phosphate)	13598-37-3	3 - 7
sodium dihydrogenorthophosphate	7558-80-7	3 - 7
Phosphoric acid, solution	7664-38-2	1 - 5
sodium 3-nitrobenzenesulphonate	127-68-4	0.5 - 1.5
nickel dinitrate	13138-45-9	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## 5. Fire-fighting measures

**Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon oxides  
nitrogen oxides  
sulfur oxides  
phosphorus oxides  
metal oxide/oxides

## 5 . Fire-fighting measures

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not breathe vapor or mist. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Vapors are heavier than air and may spread along floors. Add this product only to water. Never add water to this product. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not store above the following temperature: 120°F / 49°C.

## 8 . Exposure controls/personal protection

Name	Result	ACGIH	Ontario	Mexico	PPG
Phosphoric acid, solution	TWA STEL	1 mg/m <sup>3</sup> 3 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> 3 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> 3 mg/m <sup>3</sup>	Not established Not established
nickel dinitrate	TWA	0.1 mg/m <sup>3</sup> (as Ni) 0.1 MG/M3 TD	0.1 mg/m <sup>3</sup> (as Ni)	0.1 mg/m <sup>3</sup> (as Ni)	Not established

### Key to abbreviations

A = Acceptable Maximum Peak

SR = Respiratory sensitization

## 8 . Exposure controls/personal protection

ACGIH = American Conference of Governmental Industrial Hygienists.

C = Ceiling Limit

F = Fume

IPEL = Internal Permissible Exposure Limit

R = Respirable

S = Potential skin absorption

SS = Skin sensitization

STEL = Short term Exposure limit values

TD = Total dust

TLV = Threshold Limit Value

TWA = Time Weighted Average

### Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protection

#### Eyes

: Chemical splash goggles and face shield.

#### Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### Gloves

: nitrile, neoprene

#### Respiratory

: By spraying: air-fed respirator. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## 9 . Physical and chemical properties

### Physical state

: Liquid.

### Flash point

: losed cup: Not applicable. [Product does not sustain combustion.]

### Color

: Not available.

### Odor

: Not available.

### pH

: 2.5

### Boiling/condensation point

: &gt;37.78°C (&gt;100°F)

### Melting/freezing point

: Not available.

### Specific gravity

: .03

## 9 . Physical and chemical properties

Density ( lbs / gal )	: 8.6
Vapor pressure	: Not available.
Vapor density	: Not available.
Volatility	: 87% (v/v), 84.008% (w/w)
Evaporation rate	: Not available.
Solubility	: Soluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
% Solid. (w/w)	: 15.992

## 10 . Stability and reactivity

Stability	: Stable under recommended storage and handling conditions (see Section 7).
Conditions to avoid	: No specific data.
Materials to avoid	: Reactive or incompatible with the following materials: acids, oxidizing materials, strong alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
zinc bis(dihydrogen phosphate)	LD50 Oral	Rat	1990 mg/kg	-
sodium dihydrogenorthophosphate	LD50 Oral	Rat	8290 mg/kg	-
Phosphoric acid, solution	LD50 Oral	Rat	1.25 g/kg	-
	LD50 Dermal	Rabbit	2.74 g/kg	-
sodium 3-nitrobenzenesulphonate	LD50 Oral	Rat	11 g/kg	-

Conclusion/Summary : Not available.

### Chronic toxicity

Conclusion/Summary : Not available.

### Target organs

: Contains material which may cause damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.

### Carcinogenicity

Carcinogenicity : Contains material which can cause cancer. Risk of cancer depends on duration and level of exposure.

### Classification

Product/ingredient name	ACGIH	IARC	NTP
nickel dinitrate	A4	1	Known to be a human carcinogen.

Carcinogen Classification code:

ACGIH: A1, A2, A3, A4, A5

IARC: 1, 2A, 2B, 3, 4

NTP: Known to be a human carcinogen; Reasonably anticipated to be a human carcinogen

Not listed or regulated as a carcinogen: -

### Teratogenicity

## 12 . Ecological information

**Environmental effects** : No known significant effects or critical hazards.

## 13 . Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

## 14. Transport information

	TDG	Mexico	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Marine pollutant substances	Not applicable.	Not applicable.	Not applicable.

### Additional information

**TDG** : None identified.

**Mexico** : None identified.

**IMDG** : None identified.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## 15 . Regulatory information

Canada inventory ( DSL ) : All components are listed or exempted.

### Canada

WHMIS (Canada) : Class E: Corrosive liquid. Class D-2A: Material causing other toxic effects (Very toxic).  
Class D-2B: Material causing other toxic effects (Toxic).

### Mexico

#### Classification

Flammability : 0 Health : 3 Reactivity : 0

## 16 . Other information

### Hazardous Material Information System (U.S.A.)

Health : 3 \* Flammability : 0 Physical hazards : 0

( \*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

Health : 3 Flammability : 0 Instability : 0

Date of previous issue : 1/26/2017

Organization that prepared the MSDS : EHS

✔ Indicates information that has changed from previously issued version.

### Disclaimer

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