

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision Date: 04/16/2025

SECTION 1: IDENTIFICATION

<u>Product Identifier</u> <u>Product Form: Mixture</u>

Product Name: PDN 50 Detergent Product Code: AFCO 3252 Intended Use of the Product

Use of the Substance/Mixture: Low foaming powdered alkaline cleaner used in a spray washer for cleaning metal parts. For

professional use only.

Name, Address, and Telephone of the Responsible Party

Company

AFCO

550 Development Avenue Chambersburg, PA 17201

T: 800-345-1329 www.afcocare.com

Emergency Telephone Number

Emergency Number : 1-800-424-9300 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Met. Corr. 1 H290 Skin Corr. 1C H314 Eye Dam. 1 H318 Aquatic Acute 2 H401 Aquatic Chronic 2 H411

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)





Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H401 - Toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements (GHS-US): P234 - Keep only in original container.

P260 - Do not breathe dust if inhalable particles of dust occur during use.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 - 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/physician.

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P321 - Specific treatment (see section 4).

P363 - Wash contaminated clothing before reuse.

P390 - Absorb spillage to prevent material damage.

P391 - Collect spillage.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification: N/A.

Other Hazards: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes.

Unknown Acute Toxicity (GHS-US) Not available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Name	Product identifier	% (w/w)	Classification (GHS-US)
Sodium carbonate	(CAS No) 497-19-8	40 - 50	Eye Irrit. 2A, H319
Pentasodium triphosphate	(CAS No) 7758-29-4	10 – 20	Not classified
Sodium metasilicate	(CAS No) 6834-92-0	10 - 20	Met. Corr. 1, H290
			Acute Tox. 4 (Oral), H302
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			STOT SE 3, H335
Sodium nitrite	(CAS No) 7632-00-0	5 – 10	Ox. Sol. 2, H272
			Acute Tox. 3 (Oral), H301
			Eye Irrit. 2A, H319
			Aquatic Acute 1, H400
			Aquatic Chronic 1, H410
Alcohols, C8-10, ethers with polyethylenepolypropylene	(CAS No) 68154-99-4	1-5	Skin Irrit. 2, H315
glycol monobenzyl ether			Eye Dam. 1, H318
Tetrasodium EDTA tetrahydrate	(CAS No) 13235-36-4	1 - 5	Comb. Dust
			Acute Tox. 4 (Oral), H302
			Eye Dam. 1, H318
			Eye Irrit. 2A, H319
			STOT SE 3, H335

The exact percentage of composition are withheld as a trade secret [29 CFR § 1910.1200 App E].

Full text of H-phrases: see section 16.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention.

Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for several minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact: Seek medical attention immediately. Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye damage. Corrosive to eyes and skin. **Inhalation:** None under normal and intended conditions of use.

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Skin Contact: Causes severe skin burns. **Eye Contact:** Causes serious eye damage.

Ingestion: Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing

quickly to chemical burns.

Chronic Symptoms: Not available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable. **Explosion Hazard:** None known.

Reactivity: Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Phosphorus oxides. Carbon oxides (CO, CO₂). Toxic fumes are released. Nitrogen oxides.

Other information: Do not allow run-off from fire fighting to enter drains or water courses.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment. Do NOT breathe (dust, fumes). Do not get in eyes, on skin, or on clothing. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid generating dust.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

For Containment: Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Use explosion proof vacuum during cleanup, with appropriate filter, do not mix with other materials. Contact competent authorities after a spill. Minimize generation of dust.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. Corrosive vapors are released.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Ground/bond container and receiving equipment. Use explosion proof equipment.

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Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from incompatible materials.

Incompatible Materials: Acids. Strong oxidizers.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s)

Low foaming powdered alkaline cleaner used in a spray washer for cleaning metal parts.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Alarm detectors should be used when toxic gases may be released. Ground/bond container and receiving equipment. Use explosion-proof equipment. If user operations generate dust, fumes, vapors, gas, or spray use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or regulatory limits

Personal Protective Equipment: Protective goggles. Protective clothing. Gloves. Face shield.









Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosionproof clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: A respirator is not needed under normal and intended conditions of use.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : Off-white powder

Odor : Lemon

Odor Threshold: Not availablepH: 11.8 (1%)Relative Evaporation Rate (butylacetate=1): Not availableMelting Point: Not availableFreezing Point: Not availableBoiling Point: Not available

Flash Point : None

Auto-ignition Temperature Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not flammable **Lower Flammable Limit** Not available **Upper Flammable Limit** Not available Not available **Vapor Pressure** Relative Vapor Density at 20°C Not available **Specific Gravity** Not available Solubility Complete. Partition coefficient: n-octanol/water Not available

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Viscosity : Not available

Explosion Data – Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.

Explosion Data – Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Toxic gas.

Chemical Stability: Stable.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Incompatible materials. **Incompatible Materials:** Acids, strong oxidizers.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Thermal decomposition generates: Toxic gases. Phosphorus oxides.

Ammonia. Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified.

LD50 and LC50 Data:

PDN 50 Detergent (AFCO 3252)	
ATE US (oral)	2080.131 mg/kg body weight

Skin Corrosion/Irritation: Causes severe skin burns. pH: 11.8 (1%)

Serious Eye Damage/Irritation: Causes serious eye damage. pH: 11.8 (1%)

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Teratogenicity: Not available. **Carcinogenicity:** Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: None under normal and intended conditions of use.

Symptoms/Injuries After Skin Contact: Causes severe skin burns.
Symptoms/Injuries After Eye Contact: Causes serious eye damage.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe

irritation progressing quickly to chemical burns.

<u>Information on Toxicological Effects - Ingredient(s)</u>

LD50 and LC50 Data:

Tetrasodium EDTA tetrahydrate (13235-36-4)		
ATE US (oral)	500.00 mg/kg body weight	
Sodium nitrite (7632-00-0)		
LD50 Oral Rat	180 mg/kg	
LC50 Inhalation Rat	5.5 mg/l/4h	
Pentasodium triphosphate (7758-29-4)		
LD50 Oral Rat	3100 mg/kg	
LD50 Dermal Rabbit	>7940 mg/kg	
Sodium carbonate (497-19-8)		
LD50 Oral Rat	4090 mg/kg	
LC50 Inhalation Rat	2300 mg/m³ (Exposure time: 2 h)	
Sodium metasilicate (6834-92-0)		
LD50 Oral Rat	1153 mg/kg	

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Toxic to aquatic life with long lasting effects.

Sodium nitrite (7632-00-0)		
LC50 Fish 1	0.19 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])	
LC50 Fish 2	0.092 - 0.13 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])	
Sodium carbonate (497-19-8)		
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
Sodium metasilicate (6834-92-0)		
LC50 Fish 1	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])	
LC50 Fish 2	210 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)	

Persistence and Degradability

PDN 50 Detergent (AFCO 3252)	
Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

Dioaccainalative i otential	
PDN 50 Detergent (AFCO 3252)	
Bioaccumulative Potential	Not established.
Sodium nitrite (7632-00-0)	
Log Pow	-3.7 (at 25°C)
Sodium carbonate (497-19-8)	
BCF fish 1	(no bioaccumulation)

Mobility in Soil Not available.

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Disodium Trioxosilicate Pentahydrate)

Hazard Class : 8

Identification Number : UN3262

Label Codes: 8Packing Group: IIIMarine Pollutant: YesERG Number: 154

14.2 In Accordance with IMDG

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Disodium Trioxosilicate Pentahydrate)

Hazard Class : 8

Identification Number: UN3262Packing Group: IIILabel Codes: 8EmS-No. (Fire): F-AEmS-No. (Spillage): S-BMarine pollutant: Yes



14.3 In Accordance with IATA

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Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Disodium Trioxosilicate Pentahydrate)

Packing Group : III
Identification Number : UN3262

Hazard Class : 8 Label Codes : 8 ERG Code (IATA) : 8L

14.4 In Accordance with TDG

Proper Shipping Name : CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Disodium Trioxosilicate Pentahydrate)

Packing Group : III Hazard Class : 8

Identification Number : UN3262

Label Codes : 8
Marine Pollutant (TDG) : Yes



SECTION 15: REGULATORY INFORMATION

US Federal Regulations

PDN 50 Detergent (AFCO 3252)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard.

Alcohols, C8-10, ethers with polyethylenepolypropylene glycol monobenzyl ether (68154-99-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Sodium nitrite (7632-00-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Listed on SARA Section 313 (Specific toxic chemical listings).

Subject to TSCA Significant New Use Rule (SNUR) at 40 CFR 721.4740 which prohibits the use of alkali metal nitrites such as sodium nitrite in metalworking fluids containing amines.

SARA Section 311/312 Hazard Classes	Reactive hazard.
	Immediate (acute) health hazard.
SARA Section 313 - Emission Reporting	1.0%

Pentasodium triphosphate (7758-29-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Tetrasodium EDTA tetrahydrate (13235-36-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Sodium carbonate (497-19-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Sodium metasilicate (6834-92-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

US State Regulations

Tetrasodium EDTA tetrahydrate (13235-36-4)

U.S. - Texas - Effects Screening Levels - Short Term

Sodium nitrite (7632-00-0)

- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances
- RTK U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Pentasodium triphosphate (7758-29-4)

- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances

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RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

RTK - U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

Sodium carbonate (497-19-8)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

Sodium metasilicate (6834-92-0)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Alcohols, C8-10, ethers with polyethylenepolypropylene glycol monobenzyl ether (68154-99-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Tetrasodium EDTA tetrahydrate (13235-36-4)

Listed on the Canadian DSL (Domestic Substance List) inventory.

Sodium nitrite (7632-00-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Pentasodium triphosphate (7758-29-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium carbonate (497-19-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Sodium metasilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 04/16/2025

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Ox. Sol. 2	Oxidizing solids Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H232	May form combustible dust concentrations in air
H272	May intensify fire; oxidizer
H290	May be corrosive to metals

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H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects

NFPA Health Hazard : 3 - Short exposure could cause serious temporary or

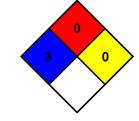
residual injury even though prompt medical attention was

given.

NFPA Fire Hazard : 0 - Materials that will not burn.

NFPA Reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



HMIS III Rating

Health : 3 Serious Hazard - Major injury is likely unless prompt action is taken, and medical treatment is

given.

Flammability : 0 - Minimal Hazard.

Physical : 0 - Minimal Hazard.

Party Responsible for the Preparation of This Document

AFCO

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T: 800-345-1329

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS SDS 2015 (U.S., Can., Mex.)

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