

SAFETY DATA SHEET

Section 1: IDENTIFICATION

Trade Name: SAPP
Identification of the Substance: Disodium dihydrogenpyrophosphate
CAS Number: 7758-16-9
Recommended Use: Drilling Fluid Additive
Restrictions on Use: -
Supplier: Bri-Chem Supply Ltd.
27075 Acheson Road
Acheson, AB T7X 6B1
Phone Number: 780-962-9490
Emergency Phone: CHEMTREC 1-800-424-9300, 24/7

Section 2: HAZARD(S) IDENTIFICATION

Classification of the Substance or Mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Classification

Section	Hazard Class	Category	Hazard Class and Category	Hazard Statement
A.3	Serious eye damage/eye irritation	2	Eye Irrit. 2	H319

For full text of abbreviations: see SECTION 16

Label Elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal Word: Warning

Pictograms

GHS07



Hazard Statements

H319: Causes serious eye irritation.

Precautionary Statements

P264: Wash face and hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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P305+P351+P338:	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313:	If eye irritation persists: Get medical advice/attention.
Other Hazards	
Results of BT and vPvB Assessment:	According to the results of its assessment, this substance is not a PBT or a vPvB.
Endocrine Disrupting Potential:	Not listed

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substances

Name of Substance: Disodium dihydrogenpyrophosphate

Identifiers

CAS No 7758-16-9

Molecular Formula: H4O7P2.2Na

Molar Mass: 207.2 g/mol

Purity: > 93%

Section 4: FIRST-AID MEASURES

Description of First Aid Measures

General Notes:	Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.
Following Inhalation:	Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.
Following Skin Contact:	Wash with plenty of soap and water.
Following Eye Contact:	Rinse cautiously with water for several minutes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.
Following Ingestion:	Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.
Notes for the Doctor:	None
Most Important Symptoms and Effects, both Acute and Delayed:	Cough, pain, choking, and breathing difficulties. Causes eye irritation.
Indication of any Immediate Medical Attention and Special Treatment Needed:	None

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Section 5: FIRE-FIGHTING MEASURES

Extinguishing Media:	Coordinate firefighting measures to the fire surroundings.
Special Hazards Arising from the Substance or Mixture:	Hazardous decomposition products: Section 10.
Hazardous Combustion Products:	Phosphorus oxides (PxOy), gas/ vapor, toxic, irritant vapors / gases.
Advice for Firefighters:	Non-combustible. In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.
Special Protective Equipment for Firefighters:	Use suitable breathing apparatus, chemical protection suit

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel:	Remove persons to safety. Ventilate affected area. Control of dust. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.
For Emergency Responders:	Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.
Environmental Precautions:	Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

Methods and Material for Containment and Cleaning Up

Advice on How to Contain a Spill:	Take up mechanically
Advice on How to Clean up a Spill:	Collect spillage
Appropriate Containment Techniques:	Neutralization techniques.
Other Information Relating to Spills and Releases:	Place in appropriate containers for disposal. Ventilate affected area.
Reference to Other Sections:	Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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Section 7: HANDLING AND STORAGE

Precautions for Safe Handling

Measures to Prevent Fire as well as Aerosol and Dust Generation:	Use local and general ventilation. Removal of dust deposits.
Specific Notes/Details:	Dust deposits may accumulate on all deposition surfaces in a technical room.
Handling of Incompatible Substances or Mixtures:	Do not mix with alkali.
Measures to Protect the Environment:	Avoid release to the environment.
Advice on General Occupational Hygiene:	Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Avoid breathing dust. Do not get in eyes, on skin, or on clothing. Wash hands after use. Preventive skin protection (barrier creams/ointments) is recommended.

Conditions for Safe Storage, Including any Incompatibilities

Flammability Hazards:	None
Incompatible Substances or Mixtures:	Incompatible materials: see section 10.
Protect Against External Exposure, Such as:	Heat, humidity.
Consideration of Other Advice:	This information are not available.
Ventilation Requirements:	Provision of sufficient ventilation.
Specific Designs for Storage Rooms or Vessels:	Store in a dry place. Store in a closed container. Store in a well-ventilated place. Keep cool.
Packaging Compatibilities:	Keep only in original container.
Specific End Use(s):	No information available.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limit Values (Workplace Exposure Limits):	This information is not available.
Exposure Controls	

Appropriate Engineering Controls:	Use local and general ventilation.
Individual Protection Measures (Personal Protective Equipment)	
Eye/Face Protection:	Wear eye/face protection

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Hand Protection

Protective Gloves

Material	Material Thickness	Breakthrough Times of the Glove Material
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IIR: isobutene-isoprene (butyl) rubber	≥ 0,7 mm	>480 minutes (permeation: level 6)
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Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Body Protection:

Protective clothing for use against solid particulates.

Respiratory Protection:

In case of inadequate ventilation wear respiratory protection. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, color code: White).

Environmental Exposure Controls:

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES
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Information on Basic Physical and Chemical Properties

Appearance

Physical State:	Solid
Color:	White
Odor:	Odorless

Other Safety Parameters

pH (Value):	3.5 – 4.5
Melting Point/Freezing Point:	900°C
Boiling Point or Initial Boiling Point and Boiling Range:	Not determined
Flash Point:	Not applicable
Evaporation Rate:	Not determined
Flammability (Solid, Gas):	Non-combustible
Explosive Limits	
Explosion Limits of Dust Clouds:	Not determined
Vapor Pressure:	Not determined

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Density:	1.86 g/cm ³
Relative Density:	This information is not available.
Relative Vapour Density:	This information is not available.
Solubility(ies)	
Water Solubility:	145 g/l
Partition Coefficient	
N-Octanol/Water (log KOW):	Not relevant (inorganic)
Auto-Ignition Temperature:	Not determined
Decomposition Temperature:	Not relevant
Viscosity:	Not relevant (solid)
Explosive Properties:	None
Oxidizing Properties:	None
Information for Relevant Hazard Classes According to GHS:	Hazard classes acc. to GHS (physical hazards): not relevant
Other Information:	There is no additional information

Section 10: STABILITY AND REACTIVITY

Reactivity:	This material is not reactive under normal ambient conditions.
Chemical Stability:	The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. See below "Conditions to avoid."
Possibility of Hazardous Reactions:	No known hazardous reactions.
Conditions to Avoid:	Keep away from heat. Protect from moisture.
Incompatible Materials:	Bases
Hazardous Decomposition Products:	Hazardous combustion products: see section 5. As a result of heating: phosphorus oxides (PxOy)

Section 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:	If not otherwise specified the classification is based on: Animal studies; Evidence from any other toxicity tests; Expert judgment (weight of evidence determination).
Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)	
Acute Toxicity:	Shall not be classified as acutely toxic (dermal).

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Exposure Route	Endpoint	Value	Species	Method
Dermal	LD0	>2,000 mg/kg	Rat	OECD Guideline 402
Skin Corrosion/Irritation:	Shall not be classified as corrosive/irritant to skin. (ECHA, OECD Guideline 404)			
Serious Eye Damage/Eye Irritation:	Causes serious eye irritation. (ECHA, EU method B.5)			
Skin Sensitization:	Shall not be classified as a skin sensitizer. (ECHA, OECD Guideline 429)			
Respiratory Sensitization:	Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.			
Germ Cell Mutagenicity:	Shall not be classified as germ cell mutagenic. (ECHA, OECD Guideline 487, OECD Guideline 490)			
Carcinogenicity				
IARC Monographs:	Not listed			
National Toxicology Program (United States):	Not listed			
OSHA Carcinogens:	Not listed			
Reproductive Toxicity:	Shall not be classified as a reproductive toxicant. (ECHA)			
Specific Target Organ Toxicity – Single Exposure:	Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.			
Specific Target Organ Toxicity – Repeated Exposure:	Classification could not be established because: Data are lacking, inconclusive, or conclusive but not sufficient for classification.			
Chronic Toxicity				
Exposure Route	Endpoint	Value	Species	Method
Oral	NOAEL	500 mg/kg bw/day	Rat	OECD Guideline 408
Aspiration Hazard:	Shall not be classified as presenting an aspiration hazard.			

Section 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic Toxicity (Acute): Based on available data, the classification criteria are not met.

Endpoint	Exposure Time	Value	Species
LC50	96h	>100 mg/l	Ranbow trout (<i>Oncorhynchus mykiss</i>)
EC50	48h	>100 mg/l	Daphnia magna
ErC50	72h	>100 mg/l	Algae (<i>Desmodesmus subspicatus</i>)

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Aquatic Toxicity (Chronic): Based on available data, the classification criteria are not met.

Endpoint	Exposure Time	Value	Species
EC50	3h	>1,000 mg/l	Activated sludge of a predominantly domestic sewage
NOEC	72h	>100 mg/l	Algae (<i>Desmodesmus subspicatus</i>)
NOEC	3h	>1,000 mg/l	Activated sludge of a predominantly domestic sewage

Persistence and Degradability

Biodegradation: The study does not need to be conducted because the substance is inorganic.

Persistence: The study does not need to be conducted because the substance is inorganic.

Bioaccumulative Potential: No data available

N-octanol/water (log KOW): Not relevant (inorganic).

Mobility in Soil: No data available

Results of PBT and vPvB Assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.

Other Adverse Effects: Not listed. This information is not available.

Remarks: None

Section 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage Disposal-Relevant Information: Do not empty into drains.

Waste Treatment of Containers/Packages: Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks: Please consider the relevant national or regional provisions.

Section 14: TRANSPORT INFORMATION

UN Number: Not assigned

UN Proper Shipping Name: -

Transport Hazard Class(es): -

Packing Group: -

Environmental Hazards: -

Special Precautions for User: -

Transport in Bulk According to IMO Instruments: -

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Information for Each of the UN Model Regulations

Transport of Dangerous Goods by Road or Rail (49 CFR US DOT) Additional Information: Not subject to transport regulations.

Section 15: REGULATORY INFORMATION

Safety, Health and Environmental Regulations Specific for the Product in Question

National Regulations (United States)

Toxic Substance Control Act (TSCA): Substance is listed as "ACTIVE"

Superfund Amendment and Reauthorization Act (SARA TITLE III)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304): Not listed

Specific Toxic Chemical Listings (EPCRA Section 313): Not listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4): Not listed

Clean Air Act: Not listed

Right to Know Hazardous Substance List

Hazardous Substance List (NJ-RTK): Not listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987: Not listed

Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, Paragraphs 34 (list I) and 35 (list II): Not listed

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Industry or Sector Specific Available Guidance(s)

NPCA-HMIS® III: Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	None
Health	2	Temporary or minor injury may occur
Flammability	0	Material that will not burn under typical fire conditions
Physical Hazard	0	Material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal Protection	-	-

NFPA® 704 National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of Hazard	Description
Flammability	0	Material that will not burn under typical fire conditions
Health	0	Material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material
Instability	0	material that is normally stable, even under fire conditions
Special Hazard	-	-

Chemical Safety Assessment: For this substance a chemical safety assessment has been carried out.

Section 16: OTHER INFORMATION

Abbreviations and Acronyms

Abbr.	Descriptions of Used Abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval

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ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IARC Monographs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50% lethality during a specified time interval
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NPCA-HMIS®III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and Very Bioaccumulative
Key Literature References and Sources for Data:	OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200. Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).
List of Relevant Phrases (Code and Full Text as Stated in Section 2 and 3)	
Code	Text
H319	Causes serious eye irritation.

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Disclaimer:

The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.

Prepared by: Bri-Chem Supply Ltd.

Revision Date: August 6, 2024