



WEST BENGAL CHEMICAL INDUSTRIES LIMITED  
145/1, Jessore Road, Lake Town,  
Kolkata – 700 089, India.  
Phone: +9133 4025 1700 Fax: +9133 2574 7410  
Email: [wbcil@wbcil.com](mailto:wbcil@wbcil.com) Website: [www.wbcil.com](http://www.wbcil.com)

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium Diformate

**Product Code :** PDFNL45

**Company Identification:**

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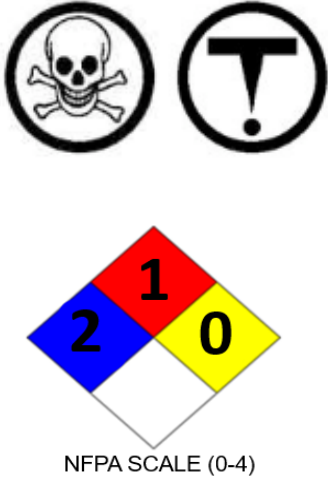
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## Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
Potassium Di Formate	590-29-4	100

## Section 3 - Hazards Identification

<b>INHALATION</b>	: May cause respiratory irritation	
<b>INGESTION</b>	: May cause gastrointestinal irritation	
<b>SKIN CONTACT</b>	: May cause skin irritation	
<b>EYE CONTACT</b>	: May cause eye irritation	
<b>CHRONIC EXPOSURE</b>	: No known significant effects or critical hazards	
<b>HAZARD STATEMENT(S)</b>	: H315- Causes skin irritation. H319- Causes serious eye irritation. H335- May cause respiratory irritation.	
<b>GHS CLASSIFICATION (UNITED STATE)</b>	: Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity - single exposure (Category 3), Respiratory system	
<b>PRECAUTIONARY STATEMENT(S)</b>	: P261- Avoid breathing dust/fume/gas/mist/vapors/spray. P264- Wash skin thoroughly after handling.	



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### Section 3 - Hazards Identification

P271- Use only outdoors or in a well-ventilated area.  
P280- Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352- IF ON SKIN: Wash with plenty of soap and water.  
P304+P340- IF INHALED: Remove 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.  
P312- Call a poison center or doctor if you feel unwell.  
P321- Specific treatment (see supplemental first aid instructions on this label).  
P332+P313- If skin irritation occurs: Get medical advice/attention.  
P337+P313- If eye irritation persists: Get medical advice/attention.  
P362- Take off contaminated clothing and wash before reuse.  
P403+P233- Store in a well-ventilated place. Keep container tightly closed.  
P405- Store locked up.  
P501- Dispose of contents/container to an approved waste disposal plant.

Health	1
Flammability	0
Physical Hazard	0
Personal protection	X

HMIS RATINGS (0-4)



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### Section 4 - First Aid Measures

<b>INHALATION</b>	:	Move exposed person to fresh air. If not breathing, seek immediate medical attention. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel and seek medical attention
<b>INGESTION</b>	:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention.
<b>SKIN CONTACT</b>	:	Remove contaminated clothing and shoes and immediately flush skin with plenty of water for at least 15 minutes.

### Section 5 - Fire-Fighting Measures

<b>HAZARDOUS COMBUSTION PRODUCTS</b>	:	Not available
<b>FIRE</b>	:	Not considered a fire hazard.
<b>EXPLOSION</b>	:	Not considered an explosion hazard
<b>FIRE EXTINGUISHING MEDIA</b>	:	Use fire-extinguishing media (Carbon dioxide, dry extinguishing media, foam, water) appropriate to the surrounding fire
<b>SPECIAL INFORMATION</b>	:	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode.
<b>SPECIFIC HAZARDS ARISING FROM THE CHEMICAL</b>	:	Carbon oxides, Potassium oxides

### Section 6 - Accidental Release Measures

<b>SPILL CONTROL &amp; RECOVERY</b>	:	Wear appropriate personal protective equipment as specified in Section 8. Clean up spills in a manner that does not disperse dust into the air. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal
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## Section 6 - Accidental Release Measures

		and place in a closed container
<b>DISPOSAL</b>	:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## Section 7 - Handling and Storage

<b>HANDLING</b>	:	Avoid contact with eyes. Avoid breathing dust. 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.
<b>STORAGE</b>	:	Store in accordance with local regulations. Store in original container, protected from direct sunlight. Keep container tightly closed and sealed until ready for use

## Section 8 - Exposure Controls / Personal Protection

<b>ENGINEERING CONTROLS</b>	:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne Contaminants below the exposure limit.
<b>PERSONAL PROTECTION</b>	:	Safety glasses, Lab Coat, Dust respirator, Be sure to use an approved / certified respirator or equivalent, Gloves. Suitable chemical resistant safety gloves (EN 374) also can be used for prolonged protection. For direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (80.7 mm) and other.  Supplementary note: The specifications are based on own tests, literature data and information of glove manufacturers or are



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### Section 8 - Exposure Controls / Personal Protection

		derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the determined permeation time. Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).
<b>PERSONAL PROTECTION IN CASE OF A LARGE SPILL</b>	:	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>EXPOSURE LIMITS</b>	:	Consult local authorities for acceptable exposure limits.
<b>RESPIRATORY PROTECTION</b>	:	If breathable aerosols/dust is formed, use Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2).

### Section 9 - Physical and Chemical Properties

<b>Appearance Form</b>	
<b>Form</b>	: Free flowing powder with Occasional friable lumps.
<b>Color</b>	: White
<b>Odour</b>	: Pungent odour
<b>Chemical Formula</b>	: $C_2H_3KO_4$
<b>Molecular weight</b>	: 130.14 g/mol
<b>pH</b>	: 7.0 – 8.5 (1M aq. Solution); 4.1 – 4.4 (10% w/v Concentration)
<b>Solubility</b>	: Soluble in water
<b>Specific Gravity/Density</b>	: 1.9100 g/cm <sup>3</sup>
<b>Boiling Point</b>	: 465°C
<b>Melting Point/ Melting Range</b>	: ~109 °C
<b>Bulk Density</b>	: ~ 0.9 – 1.0 g/cm <sup>3</sup>
<b>Decomposition Temperature</b>	: > 130 °C



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## Section 10 - Stability and Reactivity

<b>Stability</b>	:	The product is stable at normal conditions.
<b>Instability Temperature</b>	:	Not available
<b>Conditions of Instability</b>	:	Not available
<b>Incompatibility with various substances</b>	:	Not available
<b>Corrosivity</b>	:	Non corrosive in presence of glass
<b>Special remarks on Reactivity</b>	:	Not available
<b>Special remarks on Corrosivity</b>	:	Not available
<b>Polymerization</b>	:	Will not occur.

## Section 11 - Toxicological Information

<b>Routes of Entry</b>	:	Not available
<b>Acute Toxicity</b>	:	<b>Oral LD50 (rat):</b> >3000 mg/kg body weight. <b>NOAEL (oral, rat):</b> 3000 mg/kg/day (13-week study). <b>Chronic Effects:</b> No systemic toxicity identified at high doses. <b>Irritation:</b> May cause stomach irritation if ingested in high amounts.
<b>Toxicity to Animals</b>	:	Not available
<b>Chronic Effects on Humans</b>	:	Not Available
<b>Other Toxic Effects on Humans</b>	:	Not Available
<b>Special Remarks on Toxicity to Animals</b>	:	Not Available
<b>Special Remarks on Chronic Effects on Humans</b>	:	Not Available
<b>Special Remarks on other Toxic Effects on Humans</b>	:	Not Available



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## Section 12 - Ecological Information

<b>ECOTOXICITY</b>	:	Not Available
<b>BOD 5 and COD</b>	:	Not Available
<b>PRODUCTS of BIODEGRADATION</b>	:	Not available
<b>TOXICITY OF THE PRODUCTS OF BIODEGRADATION</b>	:	The Product itself and its products of degradation are not toxic.
<b>SPECIAL REMARKS ON THE PRODUCTS OF BIODEGRADATION.</b>	:	Not Available
<b>ACUTE AQUATIC</b>	:	<b>Fish:</b> Value- 3,500mg/l Test Duration- LC50 (96 h) Species- <i>Oncorhynchus mykiss</i> Method- OECD Guideline 203 semistatic  <b>Algae:</b> Value- > 1,000 mg/l Test duration- EC50 (72 h) Species- <i>Scenedesmus subspicatus</i> Method- OECD Guideline static  <b>Daphnia:</b> Value- 540 mg/l Test duration- EC50 (48 h) Species- <i>Daphnia magna</i> Method- OECD Guideline 202
<b>ACUTE TOXICITY</b>	:	<b>Rat:</b> LD50 Oral- 2000mg/kg LD50 Dermal- 5.15mg/l (4 hours)

## Section 13 - Disposal Considerations

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.



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### Section 14 - Transport Information

DOT Classification : Not a DOT controlled material  
Air transport Goods : Nonhazardous/non dangerous as per IATA DGR.  
Special Provision for Transport : Not applicable  
IATA Specification : Non-dangerous, non-hazardous

#### DOT (Pictograms)

AS PER IATA REGULATION SAFE FOR CARRAGE, NON-HAZARDOUS AND NON-RESTRICTED.

NO SPECIAL LABELLING OR TRANSPORT MEASURE HAVE BEEN IDENTIFIED.

THIS IS NOT REGULATED AS PER IATA REGULATION



### Section 15 - Regulatory Information

<b>FEDERAL AND STATE REGULATION</b>	:	No information available.
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<b>OTHER REGULATIONS</b>	:	No information available.
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### Section 16 - Other Information

**Disclaimer:** This material safety data sheet is provided as an information resource only. WEST BENGAL CHEMICAL INDUSTRIES LIMITED believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to verify its validity. The buyer assumes all responsibility of using and handling the product in accordance with federal, state, and local regulations.

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