SAFETY DATA SHEET
Petroform PF 97

1. identification of the substance/preparation and of the company/undertaking

Date issued	28.10.2009
Product name	Petroform PF 97
Chemical name	Potassium formate
Use of the substance/preparation	Additive to Oil Drilling Fluid.
Company name	ADDCON Nordic AS
Office address	Arthur Bergbysveg 6
Postal address	Postboks 2516
Postcode	3908
Place name	Porsgrunn
Country	NORWAY
Tel	+47 35 56 41 00
Fax	+47 35 56 41 01
E-mail	oyvind.oskarsen.due@addcon.net
Website	http://www.addcon.net
Enterprise no.	988 774 677
Prepared by	ADDCON Nordic AS Øyvind O. Due telephone: + 47 35 56 41 37
Emergency telephone	HESQ ADDCON Nordic AS, Øyvind O. Due:+47 35 56 41 37/ mob +47 48 26 91 48

2. Hazards identification

Description of hazard	The product is not subject to classification. The product is not classified as environmental hazard, but should nevertheless be treated carefully and not be flushed into drains, water incomes or be disposed off in nature.

3. composition/information on ingredients

Component name	Identification	Labelling/classification	Contents
Potassium formate	CAS no.: 590-29-4 EC no.: 209-677-9		95 - 100
Water	CAS no.: 7732-18-5 EC no.: 231-791-2		0 - 1
Condition agent	CAS no.: - EC no.: -		0 - 4
Column headings	CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in; %, %wt/wt, %vol/wt, %vol/vol, mg/m3, ppb, ppm, weight%, vol%		
HH/HF/HE	T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremly flammable, F = Very flammable, N = Environmental hazard		
Component comments	Component 1 is classified according to information from manufacturer. Other components does not contribute to classification of the product.		

4. first-aid measures

General	Immediately move the patient from the source of exposure. General first aid. Move to fresh air, keep the patient warm and at rest. If unconscious: Loosen tight clothing, place in stable position on one side. Give artificial respiration if breathing has stopped. Contact a physician.
Inhalation	Flush mouth, nose and throath with lots of water. Summon physician if discomfort persists.
Skin contact	Remove contaminated clothing and flush skin with copious amounts of water. Wash skin thoroughly with soap and water. If skin is very dry after washing, use lotion.
Eye contact	Flush immediately with lukewarm, running water for at least 15 minutes, also under the eyelids. Get medical advice if discomfort continues.
Ingestion	Rinse mouth thoroughly and give large amounts of milk or water to drink if person is conscious. Get medical advice immediately.
Information for health personnel	Formates can be metabolized to formic acid. Hence treatment as for Methanol should be considered. Contact the national Poisons Information Centre. General medical examination.

5. fire-fighting measures

Suitable extinguishing media	Use dry powder, foam or carbon dioxide. Water jet might be used by professional fire fighters.
Fire and explosion hazards	The product is not flammable. When heated to 360 ºC, the product will decompose to hydrogen and potassium oxalate.
Personal protective equipment	Generally: Evacuate all persons. Wear complete protective suit for fire extinguishing. Use self-contained breathing apparatus and full protective gear when the product is involved in fire.
Other Information	The fire should be extinguished from a safe place. Containers exposed to flames can be cooled with water. Move containers if possible without any risk.

6. accidental release measures

Personal precautions	Ensure good ventilation. Avoid spillage, skin and eye contact. Use protective equipment as described in item 8.
Environmental precautions	Avoid emissions of considerable amount to water or drains. Inform appropriate authorities if large amounts are involved. The product is biodegradable.
Methods for cleaning	Remove spill with absorbent material, e.g. sand, sawdust, bark. Mechanical clean-up. Collect in suitable containers. Containers shuld be labelled with the product's name and ingredients, and disposed off in accordance with section 13. Flush away traces with water.

7. handling and storage

Handling	Ensure good ventilation. Avoid spillage, skin and eye contact. Avoid dust formations. Use protective equipment as described in item 8.
Storage	Store in a dry, cool and frost-proof place, protect against direct sunlight.

8. exposure controls/personal protection

Exposure controls

Occupational exposure controls	Value the most appropriate way for controlling the exposure of chemicals to air, and if mobile or stationary test methods are most convenient. Ensure good ventilation. Eye wash facilities and shower near working area. All protective equipment should be labelled with CE. Wash hands after working with the product.
Respiratory protection	Normally not necessary. If dust is formed, use respirator with particulate filter P2 (moderate filter efficiency).

Hand protection	Use protective gloves of impervious material, e.g.: rubber gloves. Penetration time is not tested for this material, change gloves often. The penetration time might vary with exposure time, the type of work and the thickness of the glove material.
Eye protection	Wear eye protection if there is a possibility of eye contact.
Skin protection (other than of the hands)	If any risk of spilling, use rubber apron/full body suit. Remove wet and contaminated clothing. Wash contaminated clothing before reuse.

9. physical and chemical properties

Physical state	Powder / Solid / Crystaline
Odour	No odour.
Colour	White
Solubility in water	Very soluble
Specific gravity	1080 kg/m³
Melting point/melting range	169
Melting point/melting range	**Value:** °C
pH (as supplied)	8,0 - 12,0

10. stability and reactivity

Materials to avoid	Avoid contacts with acids.
Hazardous decomposition products	When heated to 360 ºC, the product will decompose to hydrogen and potassium oxalate
Stability	Stable under normal handling- and storage conditions.

11. toxicological information

Toxicological Information:

Oral toxicity	LD50(mouse) 5500 mg/kg (potassium formate)

Other information regarding health hazards

General	Low health hazard with normal use fo the product.
Inhalation	Dust can act irritating to respiratory system.
Skin contact	Prolonged contact may cause irritation.
Eye contact	Splash/dust will cause eye irritation.
Ingestion	Low health hazard when ingested. Larger amounts may cause irritation in throat/stomach.

12. ecological information

Toxicological Information:

Aquatic, comments	Not expected to bio accumulate LogPow < 0.

Other ecological information

Ecotoxicity	Acute toxicity-fish: Non toxic LC50-96h (Scopthalmus Maximus) = 1700 mg/l Acute toxicity-algae: Non toxic EC50 - 72 h (Skeletonema Costatum) = 3400 mg/l. Acute toxicity-crustacea: Non toxic LC50 48 h (Crangon Crangon) = 1300 mg/l
Mobility	The product is completely soluble in water.
Persistence and degradability	The product is biodegradable. BOD28 / ThOD > 71%

13. disposal considerations

Specify the appropriate methods of disposal	The product is not classified as hazardous waste. Dispose of in accordance with national and lokal regulations.

14. transport information

Other applicable information.	Not classified as dangerous goods.

15. regulatory information

Composition on the label	Potassium formate: 95 - 100 %, Water: 0 - 1 %, Condition agent: 0 - 4 %
S phrases	S22 Do not breathe dust. S24/25 Avoid contact with skin and eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
References (laws/regulations)	Norwegian substances list (stoffliste) 2005 (Norwegian Pollution Control Authority/SFT). REGULATION (EC) No 1907/2006 REACH article 31 Requirements for Safety Data Sheets, and Annex II guide to the compilation of safety data sheets. Norwegian occupational exposure limit values (Administrative normer for forurensning i arbeidsatmosfære, Arbeidstilsynet, best.nr. 361). (91/322/EEC, 96/94/EC, 2000/39/EC, 2006/15/EC) Classification and labelling of hazardous chemicals, (67/548/EC and 1999/45/EC) Hazardous waste (SFT 2003) (91/689/EC, 94/31/EC, 2000/532/EC, 2001/118/EC, 2001/119/EC and 2001/573/EC)

16. other information

Sources of key data used to compile the safety datasheet	HES-datasheet and information from manufacturer
Responsible for safety datasheet	ADDCON Nordic AS