



**SAFETY DATA SHEET
POTASSIUM FORMATE**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name POTASSIUM FORMATE
Synonyms, Trade Names ECOFORM PF 97

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Oil well drilling fluid additive. Oil well completion fluid additive.

1.3. Details of the supplier of the safety data sheet

Supplier M-I SWACO
A Schlumberger Company
Woodlands Drive
Kirkhill Industrial Estate
Dyce, Aberdeen AB21 0GW
Scotland UK
T=+44(0)1224-246600
F=+11(0)1224-246699
Email - MISDS@slb.com

1.4. Emergency telephone number

(24 Hour) Australia +61 2801 44558, Asia Pacific +65 3158 1074, China +86 10 5100 3039, Europe +44 (0) 1235 239 670, Middle East and Africa +44 (0) 1235 239 671, New Zealand +64 9929 1483, USA 001 281 561 1600.

National Emergency Telephone Number

+31 (0)30-2748888 Only for the purpose of informing medical personnel in cases of acute intoxications in the Netherlands.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Not classified.

Classification (67/548/EEC)

Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008

No pictogram required.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

POTASSIUM FORMATE

POTASSIUM FORMATE		60-100%
CAS-No.: 590-29-4	EC No.: 209-677-9	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

The data shown is in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures****Inhalation**

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen. Get medical attention if any discomfort continues.

Ingestion

Immediately give a couple of glasses of water or milk, provided the victim is fully conscious. Get medical attention if any discomfort continues.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed**General information**

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible. For further information, please refer to section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Extinguishing media**

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture**Hazardous combustion products**

When heated, vapours/gases hazardous to health may be formed.

Unusual Fire & Explosion Hazards

High concentrations of dust may form explosive mixture with air.

5.3. Advice for firefighters**Special Fire Fighting Procedures**

Containers close to fire should be removed immediately or cooled with water.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

POTASSIUM FORMATE**6.3. Methods and material for containment and cleaning up**

Avoid generation and spreading of dust. Shovel into dry containers. Cover and move the containers. Flush the area with water.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Avoid inhalation of dust and contact with skin and eyes. Avoid handling which leads to dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Ingredient Comments**

NUI = Nuisance dust, WEL TWA 4mg/m³ Respirable Dust, 10 mg/m³ Total Dust.

POTASSIUM FORMATE (CAS: 590-29-4)**DNEL**

Industry	Dermal	Short Term	Systemic Effects	6175 mg/kg/day
Industry	Inhalation.	Short Term	Systemic Effects	435 mg/m ³
Industry	Dermal	Short Term	Local Effects	20.6 mg/cm ²
Industry	Dermal	Long Term	Systemic Effects	6175 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	435 mg/m ³
Industry	Dermal	Long Term	Local Effects	20.6 mg/cm ²

PNEC

Freshwater	2 mg/L
Marinewater	0.2 mg/L
Intermittent release	10 mg/L
STP	1.8 mg/L
Sediment (Freshwater)	13.4 mg/kg
Sediment (Marinewater)	1.34 mg/kg
Soil	1.5 mg/kg

8.2. Exposure controls**Protective equipment****Process conditions**

All chemical Personal Protective Equipment (PPE) should be selected based on an assessment of both the chemical hazard present and the risk of exposure to those hazards. The PPE recommendations below are based on an assessment of the chemical hazards associated with this product. Where this product is used in a mixture with other products or fluids, additional hazards may be created and as such further assessment of risk may be required. The risk of exposure and need of respiratory protection will vary from workplace to workplace and should be assessed by the user in each situation.

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists. Wear mask supplied with: Dust filter P2 (for fine dust).

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Rubber or plastic.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

POTASSIUM FORMATE**Other Protection**

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Crystalline powder.
Colour	White.
Odour	No characteristic odour.
Solubility	Soluble in water.
Melting point (°C)	169°C
Relative density	1.91 g/cm ³
pH-Value, Conc. Solution	8 - 12
Solubility Value (G/100G H₂O@20°C)	331g/100ml

9.2. Other information

Not relevant

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not known.

10.4. Conditions to avoid

Not known.

10.5. Incompatible materials**Materials To Avoid**

Avoid contact with acids.

10.6. Hazardous decomposition products

When heated, vapours/gases hazardous to health may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Toxic Dose 1 - LD 50**

5500 mg/kg (oral-mouse)

Aspiration hazard:

Not anticipated to present an aspiration hazard based on chemical structure.

Inhalation

Dust may irritate respiratory system or lungs.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged and frequent contact may cause redness and irritation.

POTASSIUM FORMATE**Eye contact**

Particles in the eyes may cause irritation and smarting.

Route of entry

No route of entry noted.

Target Organs

No specific target organs noted

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

Contact M-I SWACO's QHSE Department for ecological information at env@miswaco.slb.com. OSPAR have defined this chemical as PLONOR.

12.1. Toxicity**Acute Fish Toxicity**

Not considered toxic to fish.

12.2. Persistence and degradability**Degradability**

The product is biodegradable.

12.3. Bioaccumulative potential**Bioaccumulative potential**

Will not bio-accumulate.

12.4. Mobility in soil**Mobility:**

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements.

Waste Class

The definitive European Waste code for this product will depend upon the final use that is made of this material. EWC-code: 07 01 04. Waste number: 7152. Organic waste without halogen.

SECTION 14: TRANSPORT INFORMATION**General**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

POTASSIUM FORMATE**14.5. Environmental hazards****Environmentally Hazardous Substance/Marine Pollutant**

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Uk Regulatory References**

Chemicals (Hazard Information & Packaging) Regulations. Control of Substances Hazardous to Health Regulations 2002 (as amended) Workplace Exposure Limits EH40.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

National Regulations

In accordance with Dutch Mining Regulation 9.2 and ARBO regulation Chapter 4.

Water hazard classification

WGK 1

15.2. Chemical Safety Assessment**International Chemical Inventories**

Contact REACH@miswaco.slb.com for REACH information. Complies with the following national/regional chemical inventory requirements: Australia (AICS), Canada (DSL / NDSL), China (IECSC), Europe (EINECS / ELINCS), Japan (METI / ENCS), Korea (TCCL / ECL), New Zealand (NZIoC), Phillipines (PICCS), United States (TSCA).

SECTION 16: OTHER INFORMATION**Information Sources**

Product information provided by the commercial vendor(s). Material Safety Data Sheet, Misc. manufacturers. LOLI. European Chemicals Bureau - ESIS (European Chemical Substances Information).

Revision Comments

General revision. Compiled or revised by Sandra McWilliam

Issued By Bill Cameron

Revision Date 17-Apr-12

Revision 3

Supersedes date 23-Jul-07

SDS No. 11267

Risk Phrases In Full

NC Not classified.

Disclaimer

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