Description and Ingredients:
PolyCom is a powdered concentrate of acrylamide, surfactants and binders which when mixed with water forms a liquid co-polymer (liquid soil stabiliser).

The principal function of this product is to impart improved strength to the host material in both dry and wet conditions. In conjunction with sound construction techniques the inclusion of PolyCom enables higher densities to be achieved in a wide variety of materials with the added benefit of delivering a very high degree of water resistance and increased flexibility to the treated layer. This 'hydrophobic action' assists in maintaining the improved dry pavement strength during wet cycles.

Improved pavement strength (improved CBR) is achieved through efficient particle lubrication and increased water/PolyCom viscosity which in turn creates a higher degree of densification and therefore internal friction within the treated host material. This in turn results in increased modulus (stiffness) in the stabilised layer upon drying back.

What PolyCom delivers:
PolyCom stabilisation will deliver increased CBR, increased flexibility, and a very high degree of water resistance.
PolyCom resists block cracking, fatigue and shrinkage cracking.

Uses:
Pavement stabilisation using stabilising machines or graders
Wear course improvement - natural ground and unsealed gravel roads
Stabilisation of sub-grades to increase strength and prevent water softening
Capping of sub-grade layers during construction to prevent traffic damage and water softening
Remediation of sodic soils to prevent piping (tunneling)
Haul road and hardstand construction
Weather proofing road materials

Installation:
Installation can be quoted the same as for neat water. (i.e. scarify, wet mix and re-compact)
Stabilising machine installation can also be quoted as for neat water.
This applies for all material types at all stabilisation depths. (no changes from standard wet mix procedure)
There is no extra time taken to use PolyCom stabilising aid and no extra equipment or machinery is required.
Stabilisation depth requirements:
Job by job as requirements will vary.
PolyCom stabilising aid
Specifications

Technical classification
Water Soluble Polyacrylamide / liquid soil stabiliser

Benefits of use
PolyCom stabilisation delivers increased strength (higher CBR), increased flexibility and a very high degree of water resistance to the host material. Stabilised areas are always re-workable and treated material can be stockpiled for extended periods.

Environmental
PolyCom is approved for use in water catchment areas (W.A. Health dept) and is the only stabilisation product assessed and certified with ‘ECOBuy’ (Govt centre for environmental purchasing) and the NSW local govt sustainable choice.

Plant requirements
No specialised plant or equipment is required. Installation of the product can be competently achieved by standard grader crews or stabilisation machines.

Hazard Classification
NON-HAZARDOUS SUBSTANCE. Hazard classification according to the criteria of NOHSC.NON-DANGEROUS GOODS. Dangerous goods classification according to the Australia Dangerous Goods Code. (Infosafe No/. LPWGU)

Physical Appearance
Blue/Green Crystalline Powder

Handling and Safety
As per MSDS

Packaging
Two Kilogram plastic bottles

Suggested Dosage rates - wet or dry
20 parts per million / 50,000:1 / 0.0020%
One x 2Kg bottle treats 50m3 solid

Typical Water Savings
30%-50% during construction phase

Benefits imparted to treated soil
Increased strength and flexibility - high degree of water resistance - remediation of dispersive soils and reactive clays - improved workability

Stabilised pavement classification
Modified

Testing
National testing protocol available upon request

Carbon Footprint comparison
Traditional stabilisation product - 1,500 Kg of CO2 is produced to manufacture sufficient product to stabilise 100 ton of pavement material at a standard 2% rate.

PolyCom stabilisation product - 5 Kg of CO2 is produced to manufacture sufficient product to stabilise 100 ton of pavement material at the equivalent rate.

Note: PolyCom Stabilising Aid has undergone a full and independent Australian government approved audit with several case study examples having been independently assessed - for more detailed information contact - office@rekakarya.com

Supply and Technical Assistance
Distribution of the PolyCom product in Australia is managed by the groups local members. For specific area information please contact - office@rekakarya.com
Pavement stabilisation - Utilising stabilising machines or standard grader crew delivers increased strength and flexibility as well as a high degree of water resistance - RoadTek, Moonie, Qld

Wear course upgrade - much tighter hard wearing surface that is re-workable - Shire road, Qld

Natural ground-introducing durability making bush roads more weather resistant and useable - Shire road, Qld
Remediation of dispersive soils - Stabilising high sodic sub-grades increases strength and water resistance and reduces surface and tunnel erosion through fine particle flocculation - Origin Energy

Capping of marginal sub-grades - reduced pavement requirements, less traffic and weather damage during construction - Thiess Construction

Stabilisation of hard to manage soils that are usually cut to spoil improves workability and delivers usable ground with higher strength and stability - Hancock Coal
Haul road improvement - improving wear courses on mining roads can be effected using on-site equipment and is easily managed to reduce dust and maintenance requirements - Tertiary clay at Jellinbah coal

Hardstand stabilisation - wear course stabilisation of hard stands can be completed with standard equipment saving costs - Lay down area, BMA Crinum mine

This re-sheet was stabilised with PolyCom stabilising aid the shoulders were not - 2009 flooding, Emerald, Qld
PolyCom

<table>
<thead>
<tr>
<th>Benefits/Advantages</th>
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<tbody>
<tr>
<td>Increases material strength</td>
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<tr>
<td>Flexible pavement</td>
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<tr>
<td>Water resistant pavement</td>
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<tr>
<td>Install by stabilising machine - wet and dry spread</td>
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<tr>
<td>Install by grader crew - wet and dry spread</td>
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<tr>
<td>No transport costs</td>
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<tr>
<td>Non-leeching</td>
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<tr>
<td>Not slippery when wet</td>
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<td>Non corrosive</td>
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<tr>
<td>Environmentally sound</td>
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<tr>
<td>OH&amp;S compliant</td>
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<tr>
<td>Use in clays through to gravels</td>
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<tr>
<td>Cost effective</td>
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<tr>
<td>No shrinkage cracking</td>
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<tr>
<td>No fatigue cracking</td>
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<tr>
<td>30%-50% water savings</td>
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<tr>
<td>2 Kg treats 80 tonne</td>
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‘It’s all about improving and preserving the dry strength of the available material’
For further information or technical and testing data:

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PolyCom
STABILISING AID

Stabilising Your Future