Conforms: GHS (rev 4) (2011)
- Colombia

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SAFETY DATA SHEET

17-6-18-6

Section 1. Identification

Product identifier	:	17-6-18-6
Product type	:	Solid
Product code	:	PLABRB

Uses

Area of application	:	Professional applications
Material uses	:	Fertilizers.

Supplier

Supplier's details	:	Yara Colombia S.A.

Address

Street	:	Cra 11 Piso 3
Number	:	#94A-34
City	:	Bogotá
Country	:	Colombia
Telephone number	:	+57(5) 6931215
e-mail address of person responsible for this SDS	:	info.colombia@yara.com
Emergency telephone number (with hours of operation)	:	01 8000 916012 (7/24) 01 8000 511414 (Option 1)(7/24) 01 800 5184127 (7/24)
National advisory body/Poison Center	:	Not available.

Section 2. Hazards identification

Classification and labelling have been performed following the guidelines and recommendation of GHS and the intended use.

Classification of the substance or mixture	:	ACUTE TOXICITY (oral) - Category 5 SKIN CORROSION/IRRITATION - Category 3 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements :

H303	May be harmful if swallowed.
H319	Causes serious eye irritation.
H316	Causes mild skin irritation.
H335	May cause respiratory irritation.

Precautionary statements

Prevention :

P280-a	Wear eye protection.
P261-b	Avoid breathing dust.
P264-a	Wash hands thoroughly after handling.

Response :

P305	IF IN EYES:
P351	Rinse cautiously with water for several minutes.
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists, get medical advice/attention.
P304	IF INHALED:
P340	Remove person to fresh air and keep comfortable for breathing.

Other hazards which do not result in classification : Product forms slippery surface when combined with water.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	CAS number	%
Langbeinite	14977-37-8	>= 30 - < 35
potassium chloride	7447-40-7	>= 15 - < 20
diammonium hydrogenorthophosphate	7783-28-0	>= 7 - < 10

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.
Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Rinse with plenty of running water. Check for and remove any contact lenses. If irritation persists, get medical attention.

Inhalation : If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Wash with soap and water. Get medical attention if irritation develops. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe.

Ingestion : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Causes mild skin irritation.

Ingestion : May be harmful if swallowed. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None identified.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds
metal oxide/oxides
ammonia
Avoid breathing dusts, vapors or fumes from burning materials.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : None.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training.Evacuate surrounding areas.Keep unnecessary and unprotected personnel from entering.Do not touch or walk through spilled material.Provide adequate ventilation.Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place

spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).
Do not ingest.Avoid contact with eyes, skin and clothing.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.Empty containers retain product residue and can be hazardous.Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink.Store locked up.Keep container tightly closed and sealed until ready for use.Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.
Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits : None.

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume

scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : A washing facility or water for eye and skin cleaning purposes should be present.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Tightly-fitting goggles

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Section 9. Physical and chemical properties

Appearance

Physical state	:	Solid
Color	:	Not determined.
Odor	:	Not determined.
Odor threshold	:	Not determined.
pH	:	Not determined.
Melting/freezing point	:	Not determined.
Boiling/condensation point	:	Not determined.
Sublimation temperature	:	Not determined.
Flash point	:	Not determined.
Evaporation rate	:	Not determined.
Flammability (solid, gas)	:	Non-flammable.
Lower and upper explosive (flammable) limits	:	**Lower:** Not determined. **Upper:** Not determined.
Vapor pressure	:	Not determined.
Relative density	:	Not determined.
Solubility	:	Not determined.
Partition coefficient: n-octanol/water	:	Not determined.
Auto-ignition temperature	:	Not determined.
Decomposition temperature	:	Not determined.
Viscosity	:	**Dynamic:** Not determined.
	:	**Kinematic:** Not determined.
Explosive properties	:	None.
Oxidizing properties	:	None.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid contamination by any source including metals, dust and organic materials.

Incompatible materials : Urea reacts with calcium hypochlorite or sodium hypochlorite to form the explosive nitrogen trichloride.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product / ingredient name	Result	Species	Dose	Exposure	References
potassium chloride					
	LD50 Oral	Rat	3.020 mg/kg	Not applicable.	IUCLID 5
diammonium hydrogenorthophosphate					
	LD50 Oral	Rat	> 2.000 mg/kg 425 Acute Oral Toxicity: Up-and-Down Procedure	Not applicable.	IUCLID 5
	LC50 Inhalation Dusts and mists	Rat	> 5 mg/l OECD 403	4 h	IUCLID 5
	LD50 Dermal	Rat	> 5.000 mg/kg OECD 402	Not applicable.	IUCLID 5

Conclusion/Summary : May be harmful if swallowed.

Irritation/Corrosion

Conclusion/Summary

Skin : Causes mild skin irritation.

Eyes : Causes serious eye irritation.

Respiratory : May cause respiratory irritation.

Sensitization

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Respiratory : No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Product / ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure	References
diammonium hydrogenorthophosphate	Negative	Negative	Not applicable.	Rat	Oral: > 1500 mg/kg bw/day	Not applicable.	IUCLID 5

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product / ingredient name	Category	Route of exposure	Target organs
Langbeinite	Category 3	Not applicable	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Causes mild skin irritation.

Ingestion : May be harmful if swallowed. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Product / ingredient name	Result	Species	Dose	Exposure	References
diammonium hydrogenorthophosphate	NOAEL Oral	Rat	250 mg/kg	42days	IUCLID 5

Conclusion/Summary : No known significant effects or critical hazards.

General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	4.553,9 mg/kg

Section 12. Ecological information

Toxicity

Product / ingredient name	Result	Species	Exposure	References
potassium chloride				
	Acute LC50 2.300 mg/l	Fish	48 h	IUCLID 5
	Acute EC50 825 mg/l	Daphnia magna	48 h	IUCLID 5
	Acute EC50 2.500 mg/l	Algae	72 h	IUCLID 5
diammonium hydrogenorthophosphate				
	Acute LC50 1.700 mg/l Fresh water	Fish	96 h	IUCLID 5
	Acute LC50 1.790 mg/l Fresh water	Daphnia magna	72 h	IUCLID 5
	Acute LC50 > 100 mg/l Fresh water 201 Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Algae	72 h	IUCLID 5
	Chronic No-observable-effect-concentration 100 mg/l Fresh water 201 Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Algae	72 h	IUCLID 5
	Chronic No-observable-effect-concentration 100 mg/l Fresh water	Activated sludge	3 h	IUCLID 5

	OECD 209			
	Acute EC50 > 100 mg/l Fresh water OECD 209	Activated sludge	3 h	IUCLID 5

Conclusion/Summary : No known significant effects or critical hazards.

Persistence and degradability

Conclusion/Summary : No known significant effects or critical hazards.

Bioaccumulative potential

Conclusion/Summary : No known significant effects or critical hazards.

Mobility in soil

Soil/water partition coefficient (KOC) : Not available.

Mobility : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulation: UN Class	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.

14.5 Environmental hazards	No.
Additional information **Environmental hazards** : No.	

Regulation: IMDG	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information **Marine pollutant** : Not available.	

Regulation: IATA	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	Not applicable.
14.3 Transport hazard class(es)	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental hazards	No.
Additional information **Marine pollutant** : No.	

14.6 Special precautions for user : Transport within user's premises: Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Remark : A NPK fertilizer not liable to self-sustaining exothermic decomposition according to the S.1 trough test as defined in the recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, part III, section 38.

IMSBC

Bulk cargo shipping name : FERTILIZERS WITHOUT NITRATES
Class : Not applicable.
Group : C
Marpol V : Non-HME

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not applicable.

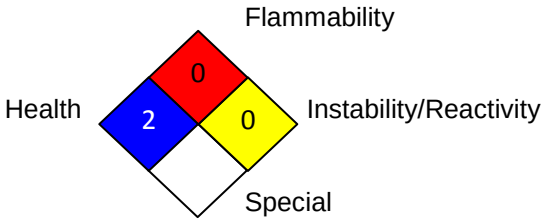
Section 15. Regulatory information

Inventory list

EC INVENTORY (EINECS/ELINCS): All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Key to abbreviations : ADN/ADNR = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
bw = Body weight
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOHSC - National Occupational Health and Safety Commission
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
SUSDP - Standard for the Uniform Scheduling of Drugs and Poisons
UN = United Nations

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 5	Calculation method
SKIN CORROSION/IRRITATION - Category 3	Calculation method
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A	Calculation method
SPECIFIC TARGET ORGAN TOXICITY	Calculation method

(SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	

References : EU REACH IUCLID5 CSR.
National Institute for Occupational Safety and Health, U.S. Dept. of Health, Education, and Welfare, Reports and Memoranda Registry of Toxic Effects of Chemical Substances.
Sphera Solutions Inc., 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada.

History

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|| Indicates information that has changed from previously issued version.

Notice to reader

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