

Safety Data Sheet

according to Regulation (EC) No. 453/2010 Date of issue: 05/12/2011 Revision date: 30/04/2015

Supersedes: 05/12/2011

Version: 2.0

SECTION 1: Identif	fication of the substance/mixture and o	of the company/undertakir	ng
1.1. Product ident	ifier		
Product form	: Mixture		
Name	: Soluplant 21-21-21+ME	, Poly-Feed 5.0.1 not classified	
Synonyms	: Soluplant/ Poly-Feed D Soluplant / Eure-Ka	rip / Poly-Feed Foliar / Poly-Feed N	/lar / Multifeed / Haifa Soluble /
Product group	: Blend		
1.2. Relevant iden	tified uses of the substance or mixture and use	s advised against	
1.2.1. Relevant iden	tified uses		
Main use category	: fertilizer		
Use of the substance/mix	kture : Fertilizer		
Supplier Haifa Chemicals P.O.Box 15011 Matam 3190500 Haifa - Israel T +972-74-7373737 - F -	supplier of the safety data sheet	Distributor Haifa Chemicals Northen Europe Generaal de Wittelaan 17, bus 16, Mechelen - Belgium T +32-15-270811 - F +32-15-2708 NorthWestEurope@haifa-group.co	15
1.4. Emergency te	lephone number		
Emergency number	: +972-48469603/4 +972-48469603/4		
Country	Organisation/Company	Address	Emergency number
UNITED KINGDOM	National Poisons Information Service (Belfas Centre) Royal Victoria Hospital	st Grosvenor Road BT12 6BA Belfast	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
UNITED KINGDOM	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
UNITED KINGDOM	National Poisons Information Service (Cardi Centre) Gwenwyn Ward, Llandough Hospital	ff Penarth CF64 2XX Cardiff	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)
UNITED KINGDOM	NPIS Edinburgh (Scottish Poisons Information Bureau)	DN 51 Little France Crescent EH16 4SA Edinburgh	0844 892 0111 (UK only, Monday to Friday, 08.00 to

Claremont Place

Newcastle-upon-Tyne NE1 4LP Newcastle

Classification of the substance or mixture 2.1.

SECTION 2: Hazards identification

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Royal Infirmary of Edinburgh

Not classified

2.2. Label elements

UNITED KINGDOM

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3. Other hazards

No additional information available

National Poisons Information Service (Newcastle

Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit

0844 892 0111 (UK only,

Monday to Friday, 08.00 to

18.00 hours)

18.00 hours)

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

OFOTION

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
potassium nitrate	(CAS No) 7757-79-1 (EC no) 231-818-8 (REACH-no) 01-2119488224-35	< 54	Ox. Sol. 3, H272	
disodium tetraborate decahydrate, borax decahydrate substance listed as REACH Candidate (Disodium tetraborate, anhydrous)	(CAS No) 1303-96-4 (EC no) 215-540-4 (EC index no) 005-011-01-1	0 - 4	Eye Irrit. 2, H319 Repr. 1B, H360FD	
Specific concentration limits:				
Name Product identifier Specific concentration limits		concentration limits		
disodium tetraborate decahydrate, borax decahydrate	(CAS No) 1303-96-4 (EC no) 215-540-4 (EC index no) 005-011-01-1	(C >= 8.5) F	(C >= 8.5) Repr. 1B, H360FD	

Full text of H-phrases: see section 16

SECTION 4: First aid measures		
4.1. Description of first aid measures		
First-aid measures general	:	Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.
First-aid measures after inhalation	:	Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
First-aid measures after skin contact	:	Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.
First-aid measures after eye contact	:	Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
First-aid measures after ingestion	:	If large quantities of this material are swallowed, call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
4.0 Monthly and and any standard and atta	- 1 -	

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Exposure effect is not known.

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

Notes to physician: No specific antidote, medical staff contacts Poisons Information Center. All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to matreilas other than this product may have occured.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: EXTINGUISHING MEDIA FOR SURROUNDING FIRES:
Unsuitable extinguishing media	: None.
5.2. Special hazards arising from the su	ibstance or mixture
Fire hazard	: DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Promotes combustion. Reactions involving a fire hazard: see "Reactivity Hazard".
Reactivity in case of fire	: This material increases the risk of fire and may add combustion.
Hazardous decomposition products in case of fire	: Oxides of potassium and oxides of nitrogen.
5.3. Advice for firefighters	
Precautionary measures fire	: Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.
Firefighting instructions	: Cool tanks/drums with water spray/remove them into safety. Do not move the load if exposed to heat. Dilute toxic gases with water spray.
Protection during firefighting	: Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

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Other information

: Move containers from fire area if possible to do so without risk.

Othern	liomation	. Nove containers normine area in possible to do so without risk.
SECT	ION 6: Accidental release m	easures
6.1.	Personal precautions, protective	e equipment and emergency procedures
6.1.1.	For non-emergency personnel	
Protect	ive equipment	: Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Reactivity hazard: compressed air/oxygen apparatus. Reactivity hazard: gas-tight suit.
Emerg	ency procedures	Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Keep containers closed. In case of hazardous reactions: keep upwind. In case of reactivity hazard: consider evacuation.
Measu	res in case of dust release	: In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows.
6.1.2.	For emergency responders	
No add	itional information available	
6.2.	Environmental precautions	
Do not	let this chemical enter the environme	nt. Keep away from drains, surface and ground water.
6.3.	Methods and material for contai	nment and cleaning up
For cor	itainment	: Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. If reacting: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.
Method	ls for cleaning up	Prevent dispersion by covering with dry sand/earth. Scoop solid spill into closing containers. See "Material-handling" for suitable container materials. Spill must not return in its original container. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.
Other i	nformation	: Use a tool to scoop up solid material and place into an appropriate labeled waste container. Do not mix with sawdust or other combustible material. Avoid creating dusty conditions and prevent wind dispersal. Keep out of waterways.
6.4.	Reference to other sections	
See Se	ction 13 for additional waste treatmen	it information.
SECT	ION 7: Handling and storage	e
7.1.	Precautions for safe handling	
Additio	nal hazards when processed	: Minimize dust generation and accumulation.
Precau	tions for safe handling	: Keep away from naked flames/heat. Avoid breathing dust. Do not get in eyes, on skin, or on clothing.
Hygien	e measures	: Eating. drinking and smoking should be prohibited in areas where this material is handeled, stored and processed. Workers should wash hands and face before eating. drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
7.2.	Conditions for safe storage, inc	uding any incompatibilities

No additional information available
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Specific end use(s)

Storage conditions Incompatible products

Storage temperature

Storage area

7.3.

Heat and ignition sources Prohibitions on mixed storage

Special rules on packaging

potassium nitrate (7757-79-1)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	20.8 mg/kg bodyweight/day
Acute - local effects, inhalation	36.7 mg/m ³
DNEL/DMEL (General population)	

: Keep container tightly closed. Store in original container.

: KEEP SUBSTANCE AWAY FROM: combustible materials. reducing agents. (strong) acids.

: Store in a dry area. Fireproof storeroom. Detached building. Meet the legal requirements.

: SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements.

: KEEP SUBSTANCE AWAY FROM: heat sources.

Secure fragile packagings in solid containers.

: Strong acids. Strong bases.

metals. organic materials.

: 20 °C

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Acute - systemic effects, oral	
Acule - Systemic enecis, Uldi	12.5 mg/kg bodyweight
Acute - local effects, inhalation	10.9 mg/m ³
Long-term - systemic effects, dermal	12.5 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.45 mg/l
PNEC aqua (marine water)	0.045 mg/l
2. Exposure controls	
ppropriate engineering controls	: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommend exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
ersonal protective equipment	: disposable particulate mask. Gloves. Safety glasses. Protective clothing.
laterials for protective clothing	: GIVE GOOD RESISTANCE: butyl rubber. neoprene. rubber. GIVE POOR RESISTANCE: natural fibres
and protection	: Gloves
ye protection	: Safety glasses. In case of dust production: protective goggles
kin and body protection	: Protective clothing
espiratory protection	: Dust production: dust mask with filter type P2

SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
Physical state	: Solid		
Appearance	: Crystalline solid. Crystalline powder.		
Colour	: Blue. Green. red. Yellow.		
Odour	: Odourless.		
Odour threshold	: No data available		
рН	: No data available		
Relative evaporation rate (butylacetate=1)	: non volatile		
Melting point	: 334 °C (Potassium Nitrate)		
Freezing point	: No data available		
Boiling point	: Not applicable		
Flash point	: Not applicable		
Auto-ignition temperature	: Not applicable		
Decomposition temperature	: 400 °C (Potassium Nitrate)		
Flammability (solid, gas)	: Non flammable		
Vapour pressure	: Not applicable		
Relative vapour density at 20 °C	: No data available		
Relative density	: No data available		
Solubility	: Not applicable.		
Log Pow	: No data available		
Viscosity, kinematic	: Non- viscous substance		
Viscosity, dynamic	: No data available		
Explosive properties	: Product does not presnet an explosion hazard. (based on molecular structure).		
Oxidising properties	: No data available		
Explosive limits	: No data available		
9.2. Other information			
Minimum ignition energy	: Not applicable		
SADT	: Not applicable		
VOC content	: Not applicable		

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SECTION 10: Stability and reactivity
10.1. Reactivity
No additional information available
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.
10.4. Conditions to avoid
dusting conditions,extreme humidity and exess heat.
10.5. Incompatible materials
Strong bases. Strong acids. Oxidizing agent.
10.6. Hazardous decomposition products
no decomposition product under normal use.

SECTION 11: Toxicological information

11.1.	Information on toxicological effects

Acute toxicity

: Not classified (Based on available data, the classification criteria are not met)

potassium nitrate (7757-79-1)	
LD50 oral rat	2000 mg/kg
LD50 dermal rat	5000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	0.527 mg/l/4h
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

	SECT	ION 12: Ecological informatic	bn
12.1 Toxicity	40.4		

Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
potassium nitrate (7757-79-1)	
LC50 fish 1	162 mg/l (96 h; Pisces; Lethal)
EC50 other aquatic organisms 1	≥ 490 mg/l 48h;Daphnia
LC50 fish 2	<= 1378 mg/l
NOEC (acute)	1700 mg/l algae
TLM fish 1	3000 mg/l (96 h; Lepomis macrochirus)
TLM fish 2	162 mg/l (96 h; Gambusia affinis)
Threshold limit other aquatic organisms 1	39 mg/l (96 h; Daphnia magna)
Threshold limit other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)

12.2. Persistence and degradability

potassium nitrate (7757-79-1)	
Persistence and degradability	In principle only abiotic degradation processes are relevant for the substance. In aquaeous solutions, the substance will dissociate into potassium and nitrate ions. Under anoxic conditions, denitrification occurs and nitrate is ultimately converted into molecular nitrogen as part of Nitrogen cycle.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

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12.3. Bioaccumulative potential	
potassium nitrate (7757-79-1)	
Log Pow	< 1 Not expected to bioaccumulate
Bioaccumulative potential	No bioaccumulation data available.
12.4. Mobility in soil	
potassium nitrate (7757-79-1)	
Ecology - soil	soil /water partition coefficient (Koc): Low potential for adsorption.
12.5. Results of PBT and vPvB assessme	int
Component	
disodium tetraborate decahydrate, borax decahydrate (1303-96-4)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
12.6. Other adverse effects	
Substances which contribute to eutrophicatiion	: Nitrates
SECTION 12: Dispessel consideration	
SECTION 13: Disposal consideration	15
13.1. Waste treatment methods	
Regional legislation (waste)	: Directive 2008/98/EC on waste, of 19 November, 2008: Depending on branch of industry and production process, also other EURAL codes may be applicable.
Waste treatment methods	: Waste must be disposed of in accordance with federal, state and local enviromental control regulations.
Sewage disposal recommendations	: Empty containers should be taken for local recycling, recovery or waste disposal.
Waste disposal recommendations	: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Precipitate/make insoluble. Remove to an authorized dump (Class I). Do not discharge into surface water.
Additional information	: LWCA (the Netherlands): KGA category 05. Hazardous waste according to Directive 2008/98/EC.
European List of Waste (LoW) code	: 06 10 02* - wastes containing dangerous substances
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / A	DN
14.1. UN number	
Not regulated for transport	
14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: Not applicable

i inizi ort propor oripping name	
Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable
14.3. Transport hazard class(es)	
ADR	
Transport hazard class(es) (ADR)	: Not applicable
IMDG	
Transport hazard class(es) (IMDG)	: Not applicable
ΙΑΤΑ	
Transport hazard class(es) (IATA)	: Not applicable
ADN	
Transport hazard class(es) (ADN)	: Not applicable
BID	
RID	. Not see Proble
Transport hazard class(es) (RID)	: Not applicable

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14.4. Packing group			
Packing group (ADR)	: Not applicable		
Packing group (IMDG)	: Not applicable		
Packing group (IATA)	: Not applicable		
Packing group (ADN)	: Not applicable		
Packing group (RID)	: Not applicable		
14.5. Environmental hazards			
Dangerous for the environment	: No		
Marine pollutant	: No		
Other information	: No supplementary information available		
14.6. Special precautions for user			
- Overland transport			
Transport regulations (ADR)	: Not subject		
- Transport by sea			
Transport regulations (IMDG)	: Not subject		
- Air transport			
Transport regulations (IATA)	: Not subject		
- Inland waterway transport			
Transport regulations (ADN)	: Not subject		
Not subject to ADN	: Yes		
- Rail transport			
Transport regulations (RID)	: Not subject		
Carriage prohibited (RID)	: No		
Not applicable	ex II of MARPOL 73/78 and the IBC Code		
SECTION 15: Regulatory information			
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture			
15.1.1. EU-Regulations	15.1.1. EU-Regulations		

15.1.1. EU-Regulations

Contains no substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit: Disodium tetraborate, anhydrous (EC 215-540-4, CAS 1303-96-4)

Contains no REACH Annex XIV substances

VOC content

: Not applicable

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out

potassium nitrate

SECTION 16: Other information

Full text of H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Ox. Sol. 3	Oxidising Solids, Category 3
Repr. 1B	Reproductive toxicity, Category 1B
H272	May intensify fire; oxidiser
H319	Causes serious eye irritation
H360FD	May damage fertility. May damage the unborn child

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SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product