

Safety Data Sheet

Issue Date: 11-Dec-2013

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Version: 6.01

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

1.1. Product identifier Product Name: Product Code Synonyms:

Osmocote Pro 17-11-10+2MgO+TE 87430225EA Osmocote Pro 17-4.8-8.3+1.2Mg+TE

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

Recommended Use:

Uses Advised Against:

Fertilizer Restricted to professional users Consumer use.

1.3. Details of the supplier of the safety data sheet Manufacturer Everris International BV

Nijverheidsweg 1-5; 6422 PD Heerlen (NL) Tel: +31 (0) 45-5609100; Fax: +31 (0) 45-5609190

For further information, please contact

INFO-MSDS@EVERRIS.COM

1.4. Emergency telephone number

IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24h)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture Mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity

Category 3 - (H412)

Classification according 67/548/EC and 88/379/EC or 1999/45/EC The product is classified and labelled in accordance with Directive 1999/45/EC. **R-code(s)** R52/53 Full text of R-phrases: see section 16

2.2. Label elements Product Identifier: Signal Word: None

Hazard Statements: H412 - Harmful to aquatic life with long lasting effects

Other hazards (UN-GHS)

Harmful to aquatic life.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Ingredients	EC-No.	CAS-No	Weight %	Classification according to 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Ammonium Nitrate; NH4NO3	229-347-8	6484-52-2	25 - 40%	O;R8 Xi;R36	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Urea	200-315-5	57-13-6	1 - 5%	NE	Not classified	01-2119463277-33
Calcium sulphate dihydrate, CaSO4+2H2O	231-900-3	10101-41-4	1 - 5%	NE	Not classified	01-2119444918-26
Iron sulphate; FeSO4+1H2O	231-753-5	7720-78-7	0.1 - 1%	Xn; R22 Xi; R36/38	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119513203-57
Iron EDTA; Fe-EDTA	239-802-2	15708-41-5	0.1 - 1%	NE	Not classified	01-2119496228-27
Magnesium oxide; MgO	215-171-9	1309-48-4	0.1 - 1%	NE	Not classified	Exempt
Copper sulphate anh; CuSO4	231-847-6	7758-98-7	0.1 - 1%	N;R50/53 Xi;R36/38 Xn;R22	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119520566-40
Manganese sulphate; MnSO4+1H2O	232-08-99	7785-87-7	0.1 - 1%	N;R51/53 Xn;R48/20/22	STOT RE 2 (H373) Aquatic Chronic 2 (H411)	01-2119456624-35
Calcium fluoride; CaF2	232-188-7	7789-75-5	0.1 - 1%	NE	Not classified	Exempt
Sodium borate; Na2B4O7	215-540-4	1330-43-4	0.1 - 1%	Repr.Cat.2;R60-6 1	Repr. 1B (H360FD)	01-2119490790-32
Sodium molybdate; Na2MoO4+2H2O	231-551-7	7631-95-0	< 0.1%	NE	Not classified	01-2119489495-21
Zinc sulphate mono hydrate; ZnSO4+1H2O	231-793-3	7446-19-7	< 0.1%	N;R50/53 Xn;R22-R41	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119474684-27

Full text of R-phrases: see section 16 Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice:

First aid measures should be executed by trained personnel only.

Inhalation:

Dusty conditions are unlikely if product is used as intended. However, if prolonged inhalation of dust occurs, remove casualty to fresh air. If symptoms persist, call a physician.

Skin Contact:	If a person feels unwell or symptoms of skin irritation appear, consult a physician. Rinse with plenty of water.
Eye Contact:	Rinse eyes with water as a precaution. If eye irritation persists, consult a specialist.
Ingestion:	If conscious, drink plenty of water. Do NOT induce vomiting. Rinse mouth. Consult a physician if necessary.
Protection of First-Aiders:	Low hazard for usual industrial or commercial handling.
4.2. Most important symptoms and	l effects, both acute and delayed
Symptoms:	None under normal processing
4.3. Indication of any immediate m	edical attention and special treatment needed
Notes to Physician:	None under normal processing.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media Suitable extinguishing media: Water.

Unsuitable extinguishing media:

High volume water jet. Dry powder. Sand. Foam.

5.2. Special hazards arising from the substance or mixture

In case of fire, the product will smoulder even without the presence of external oxygen. In these conditions the product will show self sustaining decomposition. The best method to extinguish the fire is to cool the decomposition front with water. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Hazardous Combustion Products:

Carbon oxides. Phosphorus oxides. Ammonia. Nitrogen oxides (NOx).

5.3. Advice for firefighters

Coordinate fire extinguishing measures to fire in surrounding area. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Use water spray to cool fire exposed surfaces.

Hazchem code:

2X

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions:Avoid dust formation. Sweep-up to prevent slipping hazard.For Emergency Responders:Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Keep away from living quarters.

6.3. Methods and material for containment and cleaning up

Methods for Containment:	Prevent further leakage or spillage if safe to do so.	
Methods for Cleanup:	Avoid dust formation. Shovel or sweep up. Use up product completely. Packaging material	
	is industrial waste.	

6.4. Reference to other sections

§ 8, 12, 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

General hygiene considerations:

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. When using, do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/storage conditions:

Keep away from heat and sources of ignition. Keep away from food, drink and animal feeding stuffs. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well. Keep at temperatures between 0 °C and 40 °C. 5.1C

LGK (Germany) Packaging Materials:

7.3. Specific end use(s)

Specific use(s)

Fertilizer; Read and follow label instructions; www.everris.com

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Bags or Bulk.

8.1. Control parameters

Ammonium Nitrate; NH4NO3		
Czech Republic OEL	10.0 mg/m³ TWA	
Urea		
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA	
Norway	TWA: 30 µg Hg/g Creatinine	
	STEL: 45 µg Hg/g Creatinine	
Calcium sulphate dihydrate, CaSO4+2H2O		
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 10 mg/m ³	
Portugal	TWA: 10 mg/m ³	
Switzerland	TWA: 3 mg/m ³	
Iron sulphate; FeSO4+1H2O		
UK oes/mel:	TWA: 1 mg/m ³	
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 1 mg/m ³	
Portugal	TWA: 1 mg/m ³	
Finland	TWA: 1 mg/m ³	
Denmark	TWA: 1 mg/m ³	
Switzerland	TWA: 1 mg/m ³	
Norway	TWA: 1 mg/m ³	
	STEL: 3 mg/m ³	
Ireland	TWA: 1 mg/m ³	
	STEL: 2 mg/m ³	
Iron EDTA; Fe-EDTA		
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 1 mg/m ³	
Portugal	TWA: 1 mg/m ³	
Finland	TWA: 1 mg/m ³	
Denmark	TWA: 1 mg/m ³	
Switzerland	TWA: 1 mg/m ³	
Magnesium oxide; MgO		
UK oes/mel:	STEL: 30 mg/m ³	
	STEL: 12 mg/m ³	
	TWA: 10 mg/m ³ TWA: 4 mg/m ³	
France Occupational Experience Limiter & Hour V/MEs	TWA: 4 mg/m ³	
France - Occupational Exposure Limits - 8 Hour VMEs	ő	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA	

Czech Republic OEL	5 mg/m³ TWA	
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 10 mg/m ³	
Iceland - OEL - 8 Hour	6 mg/m³ TWA Mg	
Portugal	TWA: 10 mg/m ³	
Denmark	TWA: 6 mg/m ³	
Austria	STEL 20 mg/m ³	
	STEL 10 mg/m ³	
	TWA: 5 mg/m ³	
	TWA: 10 mg/m ³	
Switzerland	TWA: 3 mg/m ³	
Poland	TWA: 5 mg/m ³	
	TWA: 10 mg/m ³	
Norway	TWA: 10 mg/m ³	
	STEL: 20 mg/m ³	
Ireland	TWA: 4 mg/m ³	
	TWA: 5 mg/m ³	
	TWA: 10 mg/m ³	
Commence and the state of the Conference of the	STEL: 10 mg/m ³	
Copper sulphate anh; CuSO4	0.5 m s/m ² TMA 0.	
Russia TWA	0.5 mg/m³ TWA Cu	
Finland	TWA: 1 mg/m ³	
Austria	STEL 4 mg/m ³	
	STEL 0.4 mg/m ³ TWA: 1 mg/m ³	
	TWA: 1 mg/m ³	
Switzerland	STEL: 0.2 mg/m ³	
Switzerland	TWA: 0.1 mg/m ³	
Poland	TWA: 0.2 mg/m ³	
Manganese sulphate; MnSO4+1H2O	1 W. C. 2 mg/m	
UK oes/mel:	TWA: 0.5 mg/m ³	
Spain Occupational Exposure Limits Data - Time Weighted Average	TWA: 0.2 mg/m ³	
(TWA):	TWA. 0.2 mg/m²	
Portugal	TWA: 0.2 mg/m ³	
Finland	TWA: 0.2 mg/m ³	
	TWA: 0.1 mg/m ³	
Denmark	TWA: 0.2 mg/m ³	
Austria	STEL 2 mg/m ³	
	TWA: 0.5 mg/m ³	
Switzerland	TWA: 0.5 mg/m ³	
Poland	TWA: 0.3 mg/m ³	
Norway	TWA: 1 mg/m ³	
·····	TWA: 0.1 mg/m ³	
	STEL: 3 ppm	
	STEL: 0.3 mg/m ³	
Ireland	TWA: 0.2 mg/m ³	
Calcium fluoride; CaF2		
Latvia - Occupational Exposure Limits - TWAs	0.5 mg/m ³ TWA (as F, listed under Hydrofluoric acid salts)	
Russia TWA	0.5 mg/m³ TWA F	
Portugal	TWA: 2.5 mg/m ³	
Denmark	TWA: 2.5 mg/m³	
Poland	STEL: 2 mg/m ³	
	TWA: 2 mg/m ³	
Ireland	TWA: 2.5 mg/m ³	
Sodium borate; Na2B4O7		
UK oes/mel:	STEL: 3 mg/m ³	
	TWA: 1 mg/m ³	
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 1 mg/m ³	
Spain Occupational Exposure Limits Data - Time Weighted Average	STEL: 6 mg/m ³	
(TWA):	TWA: 2 mg/m ³	
Iceland - OEL - 8 Hour	1 mg/m³ TWA	
Portugal	STEL: 6 mg/m ³	
	TWA: 2 mg/m ³	
Denmark	TWA: 1 mg/m ³	
Switzerland	TWA: 1 mg/m ³	

Norway	TWA: 1 mg/m ³
	STEL: 3 mg/m ³
Ireland	TWA: 1 mg/m ³
Sodium molybdate; Na2MoO4+2H2O	
UK oes/mel:	TWA: 5 mg/m ³
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 5 mg/m ³
	STEL: 10 mg/m ³
Czech Republic OEL	5 mg/m³ TWA
Spain Occupational Exposure Limits Data - Time Weighted Average (TWA):	TWA: 0.5 mg/m ³
Portugal	TWA: 0.5 mg/m ³
Finland	TWA: 0.5 mg/m ³
Denmark	TWA: 5 mg/m ³
Austria	STEL 10 mg/m ³
	TWA: 5 mg/m ³
Switzerland	TWA: 5 mg/m ³
Poland	STEL: 10 mg/m ³
	TWA: 4 mg/m ³
Norway	TWA: 5 mg/m ³
-	STEL: 10 mg/m ³
Ireland	TWA: 10 mg/m ³ TWA: 0.5 mg/m ³

Derived No Effect Level (DNEL)

No data available

Predicted No Effect Concentration (PNEC)

No data available.

8.2. Exposure controls

Engineering Measures to Reduce Ensure adequate ventilation, especially in confined areas. Exposure:

Personal protective equipment

Eye/Face Protection:	Tightly fitting safety goggles
Hand protection:	Nitrile rubber (0.26 mm). Break through time. > 8 h.
Respiratory Protection:	In case of insufficient ventilation wear suitable respiratory equipment.
Skin and Body Protection:	Lightweight protective clothing
Hygiene Measures:	Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away
	from food, drink and animal feeding stuffs.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State:	Solid
Appearance:	Prills
Color:	brown.
Odor:	Not significant
pH:	no data available
Melting Point/Freezing Point:	no data available
Boiling Point/Range:	Solid, not applicable
Flash Point:	Solid, not applicable
Evaporation Rate:	Solid, not applicable
Flammability (solid, gas):	Non-flammable
Vapor Pressure:	Solid, not applicable
Vapor Density:	Solid, not applicable
Specific Gravity:	no data available
Water Solubility:	Soluble in water
Solubility(ies)	no data available
Partition Coefficient:	Solid, not applicable
Autoignition Temperature:	not applicable

Decomposition Temperature: Explosive Properties:

no data available Doesn't present explosion hazard. Based on data of ingredients.

9.2. Other information Bulk density:

900 - 1100 kg/m³

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Not reactive.

10.2. Chemical stability

 Stable under recommended storage conditions.

 10.3. Possibility of hazardous reactions

 Hazardous Decomposition Products:

 Thermal decomposition can lead to release of irritating and toxic gases and vapors.

 Possibility of Hazardous Reactions:

 None under normal processing.

10.4. Conditions to avoid

For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well.

10.5. Incompatible materials

Strong oxidizing agents. Acids and bases. Strong reducing agents. Flammable materials. Keep away from catalysts like derivates of hexavalent chromium and metal halides. Keep away from flammable products (fuels) like charcoal, wood, flour, soot etc.

10.6. Hazardous decomposition products

None under normal processing.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity	
Product Information:	
Inhalation:	May cause irritation of respiratory tract.
Eye Contact:	May cause irritation.
Skin Contact:	May cause irritation.
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Unknown Acute Toxicity:	12% of the mixture consists of ingredient(s) of unknown toxicity.

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH4NO3	= 2217 mg/kg (Rat)		> 88.8 mg/L (Rat)4 h
Iron sulphate; FeSO4+1H2O	= 500 mg/kg (Rat)		
Copper sulphate anh; CuSO4	= 300 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	
Manganese sulphate; MnSO4+1H2O	= 782 mg/kg (Rat)		
Calcium fluoride; CaF2	= 4250 mg/kg (Rat)		
Sodium borate; Na2B4O7	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	
Sodium molybdate; Na2MoO4+2H2O	= 4233 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 2080 mg/m³ (Rat)4 h

Skin Corrosion or Irritation Serious Eye Damage or Eye Irritation Sensitization Mutagenic effects Carcinogenicity See also section 3. See also section 3. See also section 3. See also section 3. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Reproductive Toxicity

Ingredients	EU - GHS - SV - CLP (1272/2008) - Reproductive Toxicity	
Sodium borate; Na2B4O7	Reproductive Toxicity - Repr. 1B: H360FD May damage fertility. May	
	damage the unborn child. (C $>= 4.5$ %)	

Teratogenicity STOT - Single Exposure STOT - Repeated Exposure Aspiration Hazard No data available. No known effects under normal use conditions. None under normal use conditions. No data available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

12% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ingredients	Algae/aquatic plants	Fish	Crustacea
Urea		16200 - 18300: 96 h Poecilia reticulata mg/L LC50	3910: 48 h Daphnia magna mg/L EC50 Static
Iron sulphate; FeSO4+1H2O		925: 96 h Poecilia reticulata mg/L	152: 48 h Daphnia magna mg/L
Copper sulphate anh; CuSO4		0.1: 96 h Oncorhynchus mykiss mg/L LC50	0.024: 48 h Daphnia magna mg/L EC50
Sodium borate; Na2B4O7	158: 96 h Desmodesmus subspicatus mg/L	340: 96 h Limanda limanda mg/L LC50	1085 - 1402: 48 h Daphnia magna mg/L LC50

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Ingredients	LOGPOW
Ammonium Nitrate; NH4NO3	-3.1
Urea	-1.59

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

not applicable

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Disposal of Wastes:

Contaminated Packaging:

Other Information:

national and local laws and regulations. Do not re-use empty containers. Dispose of as unused product. Use up product completely. Packaging material is industrial waste.

Section 14: TRANSPORT INFORMATION

IMO / IMDG

14.1 UN-No: 14.2 Proper shipping name:

2071

AMMONIUM NITRATE BASED FERTILIZER

Disposal should be in accordance with applicable regional,

<u>9</u>

14.3_ Hazard Class:	9	
14.4	5	
Packing group:	PG III	
<u>14.5</u>	IMDC Marine Pollutente	
Component Copper sulphate anh; CuSO4	IMDG - Marine Pollutants IMDG regulated marine pollutant (Listed in the index,	
7758-98-7 (0.1 - 1%)	listed under Copper sulphate, anhydrous, hydrates and	
	solution)	
Marine Pollutant:	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO	
14.6		
EmS:	F-H / S-Q	
Special Provisions 14.7	186, 193	
Transport in bulk according to Annex II of MARPOL 73/78	Not regulated	
and the IBC Code		
ADR/RID 14.1		
UN-No:	Not regulated	
14.2	Not required	
Proper shipping name: 14.3	Not regulated	
Hazard Class:	Not regulated	
<u>14.4</u>	-	
Packing group: 14.5	Not regulated	
Environmental Hazard	Not regulated	
14.6 Special Provisions	None	
Special Provisions	None	
ΙΑΤΑ		
14.1 UN-No:	2071	
14.2		
Proper shipping name:	AMMONIUM NITRATE BASED FERTILIZER	
14.3 Hazard Class:	9	
14.4		
Packing group:	PG III	
14.5_ Environmental Hazard	Not regulated	
14.6	-	
Special Provisions	A89, A90	

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium Nitrate; NH4NO3	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)
6484-52-2 (25 - 40%)	

National regulations

France ICPE (FR):

Classified installation: article 1331 (Type I)

Belgium

Component	Belgium - Major Accidents - Qualifying Quantities for Safety Reporting	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention
Ammonium Nitrate; NH4NO3	2500 tonne (Note 3, applies to Ammonium	350 tonne (Note 3, applies to Ammonium
6484-52-2 (25 - 40%)	nitrate in which the Nitrogen content due to	nitrate in which the Nitrogen content due to
	Ammonium nitrate is >28% by weight	Ammonium nitrate is >28% by weight
	containing <=0.2 % combustible material,	containing <=0.2 % combustible material,
	>24.5% and <28% by weight containing	>24.5% and <28% by weight containing
	<=0.4% combustible material and to	<=0.4% combustible material and to
	aqueous Ammonium nitrate solutions in	aqueous Ammonium nitrate solutions in
	which the concentration of Ammonium nitra	which the concentration of Ammonium nitrate which the concentration of Ammonium nitrate
	is >80% by weight)	is >80% by weight)

Germany	
Gefahrstoffverordnung (Germany) TRGS 511	BII
LGK (Germany)	5.1C
Water Endangering Class (WGK):	1 (Everris classification)

Component	German WGK Section
Ammonium Nitrate; NH4NO3 6484-52-2 (25 - 40%)	class 1
Urea 57-13-6(1 - 5%)	class 1
Iron sulphate; FeSO4+1H2O 7720-78-7(0.1 - 1%)	class 1
Iron EDTA; Fe-EDTA 15708-41-5 (0.1 - 1%)	class 2
Magnesium oxide; MgO 1309-48-4(0.1-1%)	class 1
Copper sulphate anh; CuSO4 7758-98-7(0.1-1%)	class 2
Manganese sulphate; MnSO4+1H2O 7785-87-7(0.1-1%)	class 1
Calcium fluoride; CaF2 7789-75-5(0.1-1%)	class 1
Sodium borate; Na2B4O7 1330-43-4 (0.1 - 1%)	class 1
Sodium molybdate; Na2MoO4+2H2O 7631-95-0 (< 0.1%)	class 1
Zinc sulphate mono hydrate; ZnSO4+1H2O 7446-19-7(< 0.1%)	class 3

European Union

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

15.2. Chemical safety assessment

Not required. Substance(s) usage is covered according to Reach regulation 1907/2006.

Section 16: OTHER INFORMATION

Text of R Phrases mentioned in Section 3

R8 - Contact with combustible material may cause fire

- R22 Harmful if swallowed
- R38 Irritating to skin

R43 - May cause sensitization by skin contact

R60 - May impair fertility

R61 - May cause harm to the unborn child

R36 - Irritating to eyes

R36/38 - Irritating to eyes and skin

R48/20/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of H-Statements referred to under sections 2 and 3

H360FD - May damage fertility. May damage the unborn child

H319 - Causes serious eye irritation

H272 - May intensify fire; oxidizer

H302 - Harmful if swallowed

H318 - Causes serious eye damage

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H315 - Causes skin irritation

H373 - May cause damage to the kidneys/ liver/ eyes/ brain/ respiratory system/ central nervous system through prolonged or repeated exposure in contact with skin

H411 - Toxic to aquatic life with long lasting effects

Key or legend to abbreviations and acronyms used in the safety data sheet

- RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
- ICAO: International Civil Aviation Organization
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PNEC: Predicted No Effect Concentration
- DNEL: Derived No-Effect Level
- Reach: Registration, Evaluation, authorization of Chemicals
- CLP: EU-GHS; Classification, Labelling and Packaging

OEL: Occupational Exposure Limit

TWA: Time Weighted Average

ATE: Acute Toxicity Estimate

EUH statement: CLP (EU) specific hazard statement.

Classification procedure: - Calculation method - Expert judgment and weight of evidence determination According to EC Regulation 1907/2006 (Reach), Regulation EU Key literature references and sources for data No. 453/2010 Regulation (EC) No 1272/2008 Prepared by: Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM) **Issue Date:** 11-Dec-2013 **Revision Date:** 05-Mar-2015 Reason for revision: *** Indicates changes since the last revision. This version replaces all previous versions.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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End of Safety Data Sheet