Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II / Regulation (EU) No. 2015/830.

Finland

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Date of issue/ Date of revision : Date of previous issue :

05.07.2018 01.06.2017

Version

: 3.0



### SAFETY DATA SHEET

11-11-21 (NPK 11-4,6-17,6) (PKELWG)

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : 11-11-21 (NPK 11-4,6-17,6) (PKELWG)

Product code : PKELWG

Product type : solid (granulates )

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

#### Identified uses

Industrial distribution.

Industrial USE to formulate chemical product mixtures.

Uses advised against : None identified.

#### 1.3 Details of the supplier of the safety data sheet

Yara Suomi Oy

Uudenkaupungin tehtaat

**Address** 

Street : Hangontie
Postal code : 23501
City : Uusikaupunki
Country : Finland

P.O. Box Address

P.O. Box : PL 5
Postal code : 23501
City : Uusikaupunki
Country : Finland

 Telephone number
 : +358 (0)10 215 111

 Fax no.
 : +358 (0)10 215 3000

 e-mail address of person
 : sds.finland@yara.com

responsible for this SDS

Business ID : 0948865-5

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#### 1.4 Emergency telephone number

National advisory body/Poison Center

Name : Myrkytystietokeskus / Giftinformationscentralen

**Telephone number** : +358 (0)9 471 977 (suora/direkt) / +358 (0)9 4711

(vaihde/via växel)

Hours of operation : 24h/7

Supplier

Telephone number : +358 (0)9 471 977 (suora)

+358 (0)9 4711 (vaihde)
Hours of operation : 24h

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture.

Product definition : Mixture

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

Classification : Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Not applicable.

2.2 Label elements

Signal word : No signal word.

Hazard statements : Not applicable.

**Precautionary statements** 

General : Not applicable.

EU Regulation (EC) No. 1907/2006 (REACH) Annex XVII

- Restrictions on the manufacture, placing on the market and use of certain

dangerous substances, mixtures and articles

Special packaging requirements

Containers to be fitted with : Not applicable. child-resistant fastenings

Tactile warning of danger : Not applicable.

2.3 Other hazards

result in classification

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

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Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
ammonium nitrate	RRN: 01-2119490981- 27 EC: 229-347-8 CAS: 6484-52-2	>= 25 - < 30	Ox. Sol. 3, H272 Eye Irrit. 2, H319	[1]

#### Type

- [1] Substance classified with a physical, health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

See Section 16 for the full text of the H statements declared above.

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Remarks

This product contains Boron (see section 7 and 11).

The content is below the level required for classification of

the product as toxic to reproduction.

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

Eye contact

Rinse with plenty of running water. Check for and remove any

contact lenses. Get medical attention if irritation occurs.

Inhalation

: If inhaled, remove to fresh air. In case of inhalation of

decomposition products in a fire, symptoms may be delayed. Get medical attention if you feel unwell. 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.

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 you feel unwell.

Protection of first-aiders

No action shall be taken involving any personal risk or without

suitable training.

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

Over-exposure signs/symptoms

Eye contact

No specific data.

Inhalation

No specific data.

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Skin contact

No specific data.

Ingestion

No specific data.

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

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.

### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

Use flooding quantities of water for extinction.

Unsuitable extinguishing

media

Do NOT use chemical extinguisher or foam or attempt to

smother the fire with steam or sand.

#### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or :

mixture

No specific fire or explosion hazard.

Hazardous combustion

products

Decomposition products may include the following

materials:

nitrogen oxides sulfur oxides phosphorus oxides 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.

#### 5.3 Advice for firefighters

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### **SECTION 6: Accidental release measures**

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#### 6.1 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 (see Section 8).

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".

**6.2 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).

#### 6.3 Methods and materials for containment and cleaning up

Small spill

: Move containers from spill area. 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.

Large spill

: Move containers from spill area. 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.

6.4 Reference to other sections

See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

### **SECTION 7: Handling and storage**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). As a precaution, keep exposure as low as possible for pregnant women, children and workers in reproductive age. Avoid dust generation. Do not breathe dust.

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.

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#### 7.2 Conditions for safe storage, including any incompatibilities

#### Recommendations

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and wellventilated area, away from incompatible materials (see Section 10) and food and drink. 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. Keep away from: organic materials, oil and grease.

#### 7.3 Specific end use(s)

#### Recommendations

Do not generate and inhale liquid fertilizer aerosols.

In addition to overalls, gloves and eye protection, use of efficient respiratory protection (P2/P3 respirators with a tight face seal) during discharge of fertilizer bags and maintenance of equipment is recommended to minimize inhalation exposure and to ensure safe-use during this activity (see section 8).

Risk assessments show safe use during normal spreading of fertilizers containing below 5% of boron by tractor (liquid or granular) and backpack (liquid).

### SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

#### 8.1 Control parameters

#### Occupational exposure limits

#### Remark

No exposure limit value known.

#### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Reference should be made to monitoring standards, such as the

European Standard EN 689 (Workplace atmospheres -Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and

measurement strategy)

European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents)

European Standard EN 482 (Workplace atmospheres - General

requirements for the performance of procedures for the

measurement of chemical agents)

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Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

Product/ingredie nt name	Туре	Exposure	Value	Population	Effects
ammonium nitrate	DNEL	Long term Dermal	21,3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	37,6 mg/m³	Workers	Systemic

#### **PNECs**

Product/ingredient name	Туре	Compartment Detail	Value	Method Detail
ammonium nitrate	PNEC	Fresh water	0,45 mg/l	Assessment Factors
	PNEC	Marine water	0,045 mg/l	Assessment Factors
	PNEC	Intermittent release	4,5 mg/l	Assessment Factors
	PNEC	Sewage Treatment Plant	18 mg/l	Assessment Factors

#### 8.2 Exposure controls

Appropriate engineering controls

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.

### Individual protection measures

Hygiene measures

A washing facility or water for eye and skin cleaning purposes should be present. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

#### 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.

#### 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. For general applications, we recommend gloves with a thickness typically greater than 0.35 mm. It should be emphasized that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material.

#### **Body protection**

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

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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

Use respiratory protection with more than 94% efficiency (P2, P3 or N95) and a tight face seal, when risk of

exposure to dust.

**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.

# **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

<u>Appearance</u>

Physical state

Color

Odor Odor threshold

solid (granulates) Beige. Gray. White. Odorless.

Not determined

> 4,5 [Conc. (% w/w): 105 g/l]

Decomposes: > 210 °C

Initial boiling point and boiling

Melting point/freezing point

range

Flash point **Evaporation rate** 

Flammability (solid, gas)

Upper/lower flammability or

explosive limits Vapor pressure Vapor density Relative density **Bulk density** 

Solubility(ies)

Not determined

Not determined Not determined Non-flammable.

Lower: Not determined Upper: Not determined

Not determined Not determined Not determined Not determined

Soluble in the following materials:

cold water

Partition coefficient: n-

octanol/water

Auto-ignition temperature

Viscosity

Not determined

Not determined

Dynamic: Not determined. Kinematic: Not determined.

**Explosive properties** Non-explosive. Oxidizing properties None

9.2 Other information No additional information.

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### **SECTION 10: Stability and reactivity**

10.1 Reactivity : No specific test data related to reactivity available for this

product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous : Under normal conditions of storage and use, hazardous

<u>reactions</u> reactions will not occur.

10.4 Conditions to avoid : Avoid contamination by any source including metals, dust

and organic materials.

10.5 Incompatible materials : alkalis

combustible materials reducing materials organic materials

Acids

10.6 Hazardous : Under normal conditions of storage and use, hazardous

<u>decomposition products</u> decomposition products should not be produced.

### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Product/ingredie nt name	Result	Species	Dose	Exposure	References
ammonium nitrate					
	LD50 Oral	Rat	2.950 mg/kg OECD 401	Not applicable.	IUCLID
	LD50 Dermal	Rat	> 5.000 mg/kg OECD 402	Not applicable.	

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

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	References
11-11-21 (NPK 11- 4,6-17,6) (PKELWG)	Eyes - Non- irritating. OECD 405	Rabbit	< 1	1 - 48 h	14 h	Fertilizers Europe
ammonium nitrate	Eyes - Irritant OECD 405	Rabbit	Not applicable.		Not applicable.	IUCLID

Conclusion/Summary

Skin: Non-irritating.Eyes: Non-irritating.Respiratory: Non-irritating.

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#### **Sensitization**

Conclusion/Summary

Skin Respiratory No known significant effects or critical hazards.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/ing redient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure	References
ammonium nitrate	Not applicabl e.	Negative	Negative	Rat	Oral:> 1500 mg/kg bw/day OECD 422	28 days	IUCLID 5

Conclusion/Summary

Contains boron which may harm fertility, based on animal data. Contains boron which may harm the unborn child,

based on animal data.

Information on the likely routes of exposure

Not available.

#### Potential acute health effects

Inhalation

Exposure to decomposition products may cause a health

hazard. Serious effects may be delayed following

exposure.

Ingestion

No known significant effects or critical hazards.

Skin contact

No known significant effects or critical hazards.

Eye contact

No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation

No specific data.

Ingestion

No specific data.

Skin contact

No specific data.

Eye contact

No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate effects

No known significant effects or critical hazards.

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Potential delayed effects

No known significant effects or critical hazards.

Long term exposure

Potential immediate effects

No known significant effects or critical hazards.

Potential delayed effects

No known significant effects or critical hazards.

#### Potential chronic health effects

Product/ingredient	Result	Species	Dose	Exposure	References
name					
ammonium nitrate	Chronic NOAEL Oral	Rat	256 mg/kg	28 days	IUCLID 5
			OECD 422		
	Sub-acute NOEC Dusts	Rat	> 185 mg/kg	2 weeks 5 hours per	IUCLID 5
	and mists Inhalation		OECD 412	day	

Carcinogenicity

No known significant effects or critical hazards.

Mutagenicity

No known significant effects or critical hazards.

Fertility effects

Contains boron which may harm fertility, based on animal

data.

**Developmental effects** 

: Contains boron which may harm the unborn child, based

on animal data.

Effects on or via lactation

No known significant effects or critical hazards.

Other effects

No known significant effects or critical hazards.

Other information

: Not available.

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure	References
ammonium nitrate				
	Acute LC50 447 mg/l Fresh water	Fish	48 h	IUCLID 5
	Acute EC50 490 mg/l Fresh water	Daphnia	48 h	IUCLID 5
	Acute EC50 1.700 mg/l Salt water	Algae	10 d	IUCLID 5

Conclusion/Summary

No known significant effects or critical hazards.

#### 12.2 Persistence and degradability

Conclusion/Summary

No known significant effects or critical hazards.

#### 12.3 Bioaccumulative potential

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Conclusion/Summary

No known significant effects or critical hazards.

12.4 Mobility in soil

Soil/water partition coefficient

(KOC) Mobility Not available.

Not available.

#### 12.5 Results of PBT and vPvB assessment

PBT

Not applicable. P: Not available. B: Not available. T: Not

available.

vPvB

Not applicable. vP: Not available. vB: Not available.

12.6 Other adverse effects

No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 13.1 Waste treatment methods

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.

Hazardous waste

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU

Directive 2008/98/EC.

#### European waste catalogue (EWC)

Waste code	Waste designation
06 10 99	wastes not otherwise specified

**Packaging** 

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Empty the bag by shaking to remove as much as possible of its contents. Empty bags may be disposed of as non-hazardous material or returned for recycling.

Special precautions

This material and its container must be disposed of in a

safe way.

Empty containers or liners may retain some product residues.

Avoid dispersal of spilled material and runoff and contact

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with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

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Regulation: ADN	
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	
Danger code	: Not applicable.

regulated. applicable.
applicable.
applicable.
applicable.

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 <u>Marine pollutant</u>	: No.

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.

<u>14.6 Special precautions for</u> : Transport within user's premises: Ensure that persons

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user

transporting the product know what to do in the event of

an accident or spillage.

#### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

#### **14.8 IMSBC**

Bulk cargo shipping name

AMMONIUM NITRATE BASED FERTILIZER (non-

hazardous)

Class

Not applicable.

Group

: C

Marpol V

Non-HME

### **SECTION 15: Regulatory information**

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

Not applicable.

#### EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV: None of the components are listed.

Substances of very high concern: None of the components are listed.

EU Regulation (EC) No.

1907/2006 (REACH) Annex XVII

- Restrictions on the

manufacture, placing on the

market and use of certain

dangerous substances,

mixtures and articles

#### Other EU regulations

Ozone depleting substances (1005/2009/EU)

None of the components are listed.

#### Prior Informed Consent (PIC) (649/2012/EU)

None of the components are listed.

#### **Seveso Directive**

This product is not controlled under the Seveso Directive.

#### **National regulations**

Biocidal products regulation

Not applicable.

**Notes** 

To our knowledge no other country or state specific

regulations are applicable.

15.2 Chemical Safety

<u>Assessment</u>

Complete.

### **SECTION 16: Other information**

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Abbreviations and acronyms

ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation

[Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
DMEL = Derived Minimal Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number PBT = Persistent, Bioaccumulative and Toxic vPvB = Very Persistent and Very Bioaccumulative

bw = Body weight

Key data sources

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.

Regulation (EC) No 1272/2008 Annex VI.

# Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

#### Full text of abbreviated H statements

H272	May intensify fire; oxidizer.	
H319	Causes serious eve irritation.	

#### Full text of classifications [CLP/GHS]

Ox. Sol. 3, H272	OXIDIZING SOLIDS - Category 3
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Revision comments : Section 3. Composition/information on ingredients

Section 11. Toxicological information

See Section 12 for environmental precautions.

Date of printing : 23.07.2018
Date of issue/ Date of revision : 05.07.2018
Date of previous issue : 01.06.2017
Version : 3.0

Prepared by : Yara Chemical Compliance (YCC).

II Indicates information that has changed from previously issued version.

#### Notice to reader

To the best of our knowledge, the information provided in this Safety Data Sheet is accurate as at the date of its issue. The information it contains is being given for safety guidance purposes and relates only to the specific material and uses described in it. This information does not necessarily apply to that material when combined with other material(s) or when used otherwise than as described herein, since all materials may represent unknown hazards and should be used with caution. Final determination of the suitability of any material is the sole responsibility of the user.

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