

Conforms: GHS (rev 3)(2009)

(This Safety Data Sheet conforms to the requirements of the Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012.) - United States

**Date of issue/ Date of revision** : 11/27/2014  
**Date of previous issue** : 02/20/2014  
**Version** : 1.1



# SAFETY DATA SHEET

**YaraMila 16-16-16**

## Section 1. Identification

**Product name** : YaraMila 16-16-16  
**Product type** : Solid (prills)  
**Product code** : PH209U

### Uses

**Area of application** : Professional applications  
**Material uses** : Fertilizers.

### Supplier

**Supplier's details** : Yara North America, Inc.

### Address

**Street** : 100 North Tampa Street, Suite 3200  
**Postal code** : 33602  
**City** : TAMPA  
**Country** : United States

**Telephone number** : +1 813 222 5700  
**Fax no.** : +1 813 875 5735  
**e-mail address of person responsible for this SDS** : yna-hesq@yara.com  
**Emergency telephone number (with hours of operation)** : US: Chemtrec 24-hours Emergency Response: 1-800-424-9300  
Canada: 24 Hour Emergency Service, (Canutec 613-996-6666)

### National advisory body/Poison Center

**Name** : The National Poisons Emergency number  
**Telephone number** : 1 800 222 1222

## Section 2. Hazards identification

**OSHA/HCS status** : This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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

**Classification of the substance or mixture** : Not classified.

### GHS label elements

- Signal word** : No signal word.
- Hazard statements** : Not applicable.
- Precautionary statements**
- General** : Not applicable.
- Hazards not otherwise classified** : Product forms slippery surface when combined with water.

### Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture

Product / ingredient name	CAS number	%
Nitric acid ammonium salt (1:1)	CAS: 6484-52-2	>=30 - <35
Nitric acid potassium salt	CAS: 7757-79-1	>=7 - <10
Ammonium chloride ((NH <sub>4</sub> )Cl)	CAS: 12125-02-9	>=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. 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. 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 adverse health effects persist or are severe.

#### Most important symptoms/effects, acute and delayed

##### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

##### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.

- Skin contact** : No specific data.
- Ingestion** : No specific data.

**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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (section 11)

## Section 5. Fire-fighting measures

**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.
- Specific hazards arising from the chemical** : The product itself is not combustible but it can support combustion, even in absence of air. On heating it melts and further heating can cause decomposition, releasing toxic fumes containing nitrogen oxides and ammonia.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
nitrogen oxides  
phosphorus oxides  
halogenated compounds  
metal oxide/oxides  
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** : Non-flammable.
- 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. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised 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".
- Personal precautions, protective equipment and emergency procedures** :
- 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).
- 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. Vacuum or sweep up material and place in a designated, 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. Vacuum or sweep up material and place in a designated, 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**

- Precautions for safe handling** :
- 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. Do not ingest. Avoid contact with eyes, skin and clothing. 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. See also Section 8 for additional information on hygiene measures.
- Protective measures** :
- Put on appropriate personal protective equipment (see Section 8).
- 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. 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.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Ammonium chloride ((NH <sub>4</sub> )Cl)	<p><b>OSHA PEL 1989 (1989-03-01)</b> PEL: Permissible Exposure Level 10 mg/m<sup>3</sup></p> <p><b>OSHA PEL 1989 (1989-03-01)</b> Short Term Exposure Limit 20 mg/m<sup>3</sup></p> <p><b>NIOSH REL (1994-06-01)</b> Time Weighted Average (TWA) 10 mg/m<sup>3</sup> Form: Fume</p> <p><b>NIOSH REL (1994-06-01)</b> Short Term Exposure Limit 20 mg/m<sup>3</sup> Form: Fume</p> <p><b>ACGIH TLV (1994-09-01)</b> TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 10 mg/m<sup>3</sup> Form: Fume</p> <p><b>ACGIH TLV (1994-09-01)</b> TLV-STEL: Threshold Limit Value - Short Time Exposure Level 20 mg/m<sup>3</sup> Form: Fume</p>
Calcium fluoride (CaF <sub>2</sub> )	<p><b>OSHA PEL (1993-06-30)</b> PEL: Permissible Exposure Level 2.5 mg/m<sup>3</sup> (Calculated as F)</p> <p><b>OSHA PEL Z2 (1993-06-30)</b> PEL: Permissible Exposure Level 2.5 mg/m<sup>3</sup> Form: Dust</p> <p><b>OSHA PEL 1989 (1989-03-01)</b> PEL: Permissible Exposure Level 2.5 mg/m<sup>3</sup> (Calculated as F)</p> <p><b>ACGIH TLV (1994-09-01)</b> TLV-TWA: Threshold Limit Value - Time weighted average PEL: Permissible Exposure Level 2.5 mg/m<sup>3</sup> (Calculated as F)</p>

#### **Appropriate engineering controls**

- : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure 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**

- : 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. 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.

#### **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

<b>Body protection</b>	: necessary.
<b>Other skin protection</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
<b>Respiratory protection</b>	: 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. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Solid [prills]
<b>Color</b>	: Gray.
<b>Odor</b>	: Odorless.
<b>Odor threshold</b>	: Not determined.
<b>pH</b>	: 4.5 [Conc.: 100 g/l]
<b>Melting/freezing point</b>	: Decomposes: 160 °C (320.00 °F)
<b>Boiling/condensation point</b>	: Not determined.
<b>Sublimation temperature</b>	: Not determined.
<b>Flash point</b>	: Not determined.
<b>Evaporation rate</b>	: Not determined.
<b>Flammability</b>	: Non-flammable.
<b>Lower and upper explosive (flammable) limits</b>	: <b>Lower:</b> Not determined. <b>Upper:</b> Not determined.
<b>Vapor pressure</b>	: Not determined.
<b>Relative density</b>	: Not determined.
<b>Solubility</b>	: Soluble in the following materials: cold water
<b>Partition coefficient: n-octanol/water</b>	: Not determined.
<b>Auto-ignition temperature</b>	: Not determined.
<b>Decomposition temperature</b>	: 160 °C (320.00 °F)
<b>Viscosity</b>	: <b>Dynamic:</b> Not determined. <b>Kinematic:</b> Not determined.
<b>Explosive properties</b>	: None.
<b>Oxidizing properties</b>	: Not determined.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: 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** :  
alkalis  
combustible materials  
reducing materials  
organic materials  
acids
- 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
Nitric acid ammonium salt (1:1)					
	LD50 Oral	Rat	2,950 mg/kg OECD 401	-	IUCLID 5
	LD50 Dermal	Rat	> 5,000 mg/kg OECD 402	-	IUCLID 5
Nitric acid potassium salt					
	LD50 Oral	Rat	> 2,000 mg/kg	-	IUCLID 5
	LD50 Dermal	Rat	> 5,000 mg/kg	-	IUCLID 5
Ammonium chloride ((NH <sub>4</sub> )Cl)					
	LD50 Oral	Rat	1,410 mg/kg	-	IUCLID 5
	LD50 Dermal	Rat	> 2,000 mg/kg	-	IUCLID 5

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

#### Irritation/Corrosion

Product / ingredient name	Result	Species	Score	Exposure	Observation	References
Mixture	Eyes - Non-irritating. OECD 405	Rabbit	< 1	1 - 48 h	14 d	Fertilizers Europe
Nitric acid ammonium salt (1:1)	Eyes - Irritant OECD 405	Rabbit			-	IUCLID 5
Nitric acid potassium salt	Skin - Non-irritating. OECD 404	Rabbit	0		72 h	IUCLID 5
Ammonium chloride ((NH <sub>4</sub> )Cl)	Eyes - Irritant	Rabbit			-	IUCLID 5

#### **Conclusion/Summary**

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

**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****Classification**

Product / ingredient name	OSHA	IARC	NTP
Nitric acid ammonium salt (1:1)		2A	

Nitric acid potassium salt		2A	
----------------------------	--	----	--

- Conclusion/Summary** : There is inadequate evidence in humans and in animals for the carcinogenicity of nitrate in food. Nitrate can be reduced to form nitrite and under acidic gastric conditions nitrite may react to generate N-nitroso compounds (endogenous nitrosation). Under conditions that result in endogenous nitrosation ingested nitrate is classified IARC Group 2A. The product is not to be ingested.

**Reproductive toxicity**

Product / ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure	References
Nitric acid ammonium salt (1:1)	-	Negative	Negative	Rat	Oral: > 1500 mg/kg bw/day OECD 422	28 days	IUCLID 5
Nitric acid potassium salt	Negative	Negative	Negative	Rat	Oral: > 1500 mg/kg bw/day OECD 422	28 days	IUCLID 5
Ammonium chloride ((NH <sub>4</sub> )Cl)	-	Negative	Negative	Rat	Oral: 1500 mg/kg bw/day	-	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)

No known significant effects or critical hazards.

#### Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

#### Aspiration hazard

No known significant effects or critical hazards.

**Information on the likely routes of exposure** : Not available.

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

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

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

#### Delayed and immediate effects and also 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
Nitric acid ammonium salt (1:1)	NOAEL Oral	Rat	256 mg/kg OECD 422	28days	IUCLID 5
Nitric acid ammonium salt (1:1)	NOEC Dusts and mists Inhalation	Rat	> 185 mg/kg OECD 412	2weeks 5 hours per day	IUCLID 5
Nitric acid potassium salt	NOAEL Oral	Rat	> 1500 mg/kg	28days	IUCLID 5

Ammonium chloride ((NH <sub>4</sub> )Cl)	NOAEL Oral	Rat - Male	684 mg/kg	10weeks	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** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

#### Numerical measures of toxicity

##### **Acute toxicity estimates**

Not available.

## Section 12. Ecological information

### Toxicity

Product / ingredient name	Result	Species	Exposure	References
Nitric acid ammonium salt (1:1)				
	Acute LC50 447 mg/l Fresh water	Fish - Labeo boga	48 h	IUCLID 5
	Acute EC50 490 mg/l Fresh water	Aquatic invertebrates. - Daphnia	48 h	IUCLID 5
	Acute EC50 1,700 mg/l Salt water	Aquatic plants - Heterosigma akashiwo	10 d	IUCLID 5
Nitric acid potassium salt				
	Acute LC50 1,378 mg/l Fresh water OECD 203	Fish - Labeo boga	96 h	IUCLID 5
	Acute EC50 490 mg/l Fresh water	Aquatic invertebrates. - Daphnia	48 h	IUCLID 5
	Acute EC50 > 1,700 mg/l Fresh water	Aquatic plants - Heterosigma akashiwo	240 h	IUCLID 5
Ammonium chloride ((NH <sub>4</sub> )Cl)				
	Acute LC50 174 mg/l Marine water	Fish - Labeo boga	96 h	IUCLID 5
	Acute LC50 209 mg/l Fresh water	Fish - Labeo boga	96 h	IUCLID 5
	Acute EC50 101 mg/l Fresh water	Aquatic invertebrates.	48 h	IUCLID 5

		- Daphnia		
	Acute EC50 90.4 mg/l Marine water	Aquatic plants - Heterosigma akashiwo	10 d	IUCLID 5
	Acute EC50 1,300 mg/l Fresh water	Aquatic plants - Chlorella ovalis	5 d	IUCLID 5

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

#### **Persistence/degradability**

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

Product / ingredient name	Aquatic half-life	Photolysis	Biodegradability
Nitric acid ammonium salt (1:1)			
			Not relevant for inorganic substances.
Ammonium chloride ((NH <sub>4</sub> )Cl)			
			Not relevant for inorganic substances.

#### **Bioaccumulative potential**

Product / ingredient name	LogPow	BCF	Potential
Ammonium chloride ((NH <sub>4</sub> )Cl)	-3.2	-	low

**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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**United States - RCRA Acute hazardous waste "P" List:**

Not listed

**United States - RCRA Toxic hazardous waste "U" List:**

Not listed

**Section 14. Transport information**

Regulation: UN Class	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
14.4 Packing group	
14.5 Environmental hazards	No.
14.6 Additional information <u>Environmental hazards</u>	: No.

Regulation: IMDG	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
14.4 Packing group	
14.5 Environmental hazards	
14.6 Additional information	

Regulation: IATA	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
14.4 Packing group	
14.5 Environmental hazards	
14.6 Additional information	

Regulation: DOT Classification	
14.1 UN number	Not regulated.
14.2 UN proper shipping name	
14.3 Transport hazard class(es)	
14.4 Packing group	
14.5 Environmental hazards	No.
14.6 Additional information	

**Environmental hazards** : No.

**Regulation: TDG Class**

**14.1 UN number** : Not regulated.

**14.2 UN proper shipping name**

**14.3 Transport hazard class(es)**

**14.4 Packing group**

**14.5 Environmental hazards** : No.

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

**Special precautions for user** : Transport within user's premises: always transport in closed containers that are upright and secure. 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.

**IMSB**

**Bulk cargo shipping name** : AMMONIUM NITRATE BASED FERTILIZER (non-hazardous)

**Class** : Not applicable.

**Group** : C

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not applicable.

## Section 15. Regulatory information

**United States**

**U.S. Federal regulations** :

- United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
- United States - TSCA 4(a) - Final Test Rules:** Not listed
- United States - TSCA 4(e) - ITC Priority list:** Not listed
- United States - TSCA 4(a) - Proposed test rules:** Not listed
- United States - TSCA 4(f) - Priority risk review:** Not listed
- United States - TSCA 5(a)2 - Final significant new use rules:** Not listed
- United States - TSCA 5(a)2 - Proposed significant new use rules:** Not listed
- United States - TSCA 5(e) - Substances consent order:** Not listed
- United States - TSCA 6 - Final risk management:** Not listed
- United States - TSCA 6 - Proposed risk management:** Not listed

**United States - TSCA 8(a) - Comprehensive assessment report (CAIR):** Not listed  
**United States - TSCA 8(a) - Chemical risk rules:** Not listed  
**United States - TSCA 8(a) - Dioxin/Furane precursor:** Not listed  
**United States - TSCA 8(a) - Chemical Data Reporting (CDR):** Not determined  
**United States - TSCA 8(a) - Preliminary assessment report (PAIR):** Not listed  
**United States - TSCA 8(c) - Significant adverse reaction (SAR):** Not listed  
**United States - TSCA 8(d) - Health and safety studies:** Not listed  
**United States - EPA Clean water act (CWA) section 307 - Priority pollutants:** Not listed  
**United States - EPA Clean water act (CWA) section 311 - Hazardous substances:** Listed Ammonium chloride ((NH<sub>4</sub>)Cl)  
**United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances:** Not listed  
**United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances:** Not listed  
**United States - Department of commerce - Precursor chemical:** Not listed

**Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed  
**Clean Air Act Section 602 Class I Substances** : Not listed  
**Clean Air Act Section 602 Class II Substances** : Not listed  
**DEA List I Chemicals (Precursor Chemicals)** : Not listed  
**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

Not applicable.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Delayed (chronic) health hazard

**SARA 313**

		<b><u>Product name</u></b>	<b><u>CAS number</u></b>	<b><u>Concentration</u></b>
<b>Form R - Reporting requirements</b>	:	Nitric acid ammonium salt (1:1)	6484-52-2	30 - 35
		Nitric acid potassium salt	7757-79-1	7 - 10
		Ammonium chloride	12125-02-9	7 - 10

		((NH4)Cl)		
<b>Supplier notification</b>	:	Nitric acid ammonium salt (1:1)	6484-52-2	30 - 35
		Nitric acid potassium salt	7757-79-1	7 - 10
		Ammonium chloride ((NH4)Cl)	12125-02-9	7 - 10

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

### State regulations

#### **Massachusetts**

- : The following components are listed:  
Nitric acid ammonium salt (1:1)  
Nitric acid potassium salt  
Ammonium chloride ((NH4)Cl)

#### **New York**

- : The following components are listed:  
Ammonium chloride ((NH4)Cl)

#### **New Jersey**

- : The following components are listed:  
Nitric acid ammonium salt (1:1)  
Nitric acid potassium salt  
Ammonium chloride ((NH4)Cl)  
Calcium fluoride (CaF2)

#### **Pennsylvania**

- : The following components are listed:  
Nitric acid ammonium salt (1:1)  
Nitric acid potassium salt  
Ammonium chloride ((NH4)Cl)

### California Prop. 65

This product contains a chemical (or chemicals) known to the State of California to cause cancer and birth defects or other reproductive harm.

### International lists

**New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.

**Korea inventory:** All components are listed or exempted.

**Canada inventory (DSL and NDSL):** All components are listed or exempted.

**United States inventory (TSCA 8b):** All components are listed or exempted.

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

#### **Safety, health and**

**environmental regulations specific for the product**

- : No known other specific national and/or regional regulations applicable to this product (including its ingredients).

## **Section 16. Other information**

### Hazardous Material Information System (U.S.A.)

<b>Health</b>	-	1
<b>Flammability</b>		0
<b>Physical hazards</b>		0

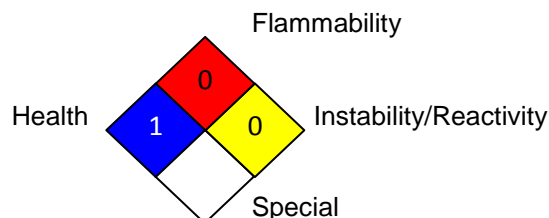
**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

**Chronic toxicity:**

- : No data available.

\* : Carcinogen, Target organs, Reproductive effects, Sensitizer to lungs

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

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**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 73/78 = 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

**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.
- : IHS, 4777 Levy Street, St Laurent, Quebec HAR 2P9, Canada.

**History**

- : **Date of printing** : 12/08/2014
- : **Date of issue/Date of revision** : 11/27/2014
- : **Date of previous issue** : 02/20/2014
- : **Version** : 1.1
- : **Prepared by** : Yara Product Classifications & Regulations.



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

**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**