



# MATERIAL SAFETY DATA SHEET

## 1. PRODUCT INFORMATION

**Product Identifier:** Jurassic Grow™

**Manufacturer's Name:** Les Produits Jurassic  
**Address** : 468 rue Desjardins  
St-Colomban, Quebec, Canada  
J5K 2H1  
**Tel** : 1-514-381-5252

**Chemical Family** : Inorganic salt

**Type of product end use:** Water soluble fertilizer for plants

**Emergency Phone number:** 1-613-996-6666

## 2. HAZARDS IDENTIFICATION

**Physical state:** Blue odorless crystalline powder

**Emergency overview:** Warning! OXIDIZER.MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: MUCOUS MEMBRANES.CONTACT WITH ORGANIC MATERIAL MAY CAUSE FIRE. Store in tightly-closed container. Avoid contact with combustible materials. Do not ingest, keep out of the reach of children, store under cool dry conditions, wash thoroughly after handling.

**Route of entry:** Dermal contact. Eye contact, Inhalation, Ingestion.

**Potential acute health effects :**

<b>Acute eye</b>	May cause irritation.
<b>Acute skin</b>	May cause irritation, especially with moist skin.
<b>Acute inhalation</b>	May cause irritation to the respiratory tract.
<b>Acute ingestion</b>	May cause irritation to the digestive tract.

**Potential chronic health effects :** Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH  
Mutagenic effects: Not available.  
Teratogenic Effects: Not available.

**Medical condition aggravated by overexposure :** Repeated or prolonged exposure to the substance can produce target organs damage.

\* See toxicological information (section 11)

### **3. COMPOSITION, INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS NO.</b>	<b>%</b>
Potassium nitrate	7757-79-01	95-97

\*This material is classified as hazardous under OSHA regulations.

\*See sections 8,11 and 14 for more details.

### **4. FIRST AID MEASURES**

**Eye contact :** Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

**Skin contact :** Wash with soap and water. Get medical attention if symptoms occur.

**Inhalation :** If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

**Ingestion :** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

**Note to physician :** No specific antidote. Medical staff must contact Poison Control Center.

### **5. FIRE FIGHTING MEASURE**

**Flammability of the product :** Non-flammable.

**Products of combustion :** Not combustible. Thermal decomposition products are dependent on temperature conditions. These products are water, oxides of potassium and oxides of nitrogen.

**Fire-fighting media and Instructions :** Use an extinguishing agent suitable for the surrounding fire. This material increases the risk of fire and may aid combustion. Contact with combustible material may cause fire.

**Special remarks on explosion hazards :** Non-explosive under normal conditions

**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.

## **6. ACCIDENTAL RELEASE MEASURE**

**Personal precautions :** Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.

**Environmental precautions :** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Methods for cleaning up :** If emergency personnel are unavailable, carefully scoop up spilled materials and use a non-sparking or explosion-proof means to transfer material to an appropriate container for disposal by incineration. Avoid creating dusty conditions and prevent wind dispersal.

## **7. HANDLING AND STORAGE**

**Handling :** Store in tightly-closed container. Avoid contact with combustible materials.

**Storage :** Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles.

## **8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

**Engineering controls :** Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### **Personal protection**

**Eyes :** Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Safety glasses.

**Respiratory :** 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. Recommended: Dust respirator.

**Hands :** 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.  
>8 hour/hours (breakthrough time): Natural rubber (latex).

**Skin/Body :** Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Body: Recommended: Lab coat.

**Personal protection in case of a large spill :** Safety glasses, goggles or face shield.  
Impervious gloves. Full suit. Boots. Wear

NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state :** Solid. (Crystalline./Powder.)

**Color :** Blue

**Odor :** Odorless.

**Molecular weight :** 101.1 g/mole

**PH :** 6 to 10.5 (Conc. (% w/w): 10) [Basic.]

**Melting/freezing point :** 333.85°C (632.9°F)

**Bulk density :** 1.1 g/cm<sup>3</sup>

**Vapor pressure :** <0.1 kPa (<1 mm Hg) (at 20°C)

**Vapor density :** Non-volatile.

**Volatility :** Non-volatile.

**Odor threshold :** Not available.

**Evaporation rate :** Non-volatile.

**VOC :** Not an organic solvent.

**Viscosity :** Non-viscous substance

**LogKow :** The product is more soluble in water; log(octanol/water) <1.

**Solubility :** 31.6 g;/ 100 ml of water at 20°C (68°F).

## **10. STABILITY AND REACTIVITY**

**Chemical stability :** Stable under normal temperatures and pressures.

**Conditions of instability :** Excessive heating.

**Incompatibility with various substances :** Reactive with reducing agents, organic materials, acids. Slightly reactive with moisture.

**Hazardous Decomposition Products :** Under fire - oxides of nitrogen, oxides of potassium.

**Hazardous polymerization :** Will not occur.

## **11. TOXICOLOGICAL INFORMATION**

**Toxicity data**

**Ingredient name :** Potassium nitrate

**Acute oral toxicity to Rat, LD50 :** 3750 mg/kg

**Acute oral toxicity to Rabbit, LD50 :** 1901 mg/kg

**Acute effects**

**Skin :** No known significant effects or critical hazards.

**Eye :** No known significant effects or critical hazards.

**Inhalation :** No known significant effects or critical hazards.

**Ingestion :** Practically non-toxic if swallowed.

**Potential chronic health effects :** Carcinogenic effects : Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

**Mutagenic effects:** Not applicable.

**Teratogenic Effects: Not applicable.**

**Target organs : May cause damage to the following organs: mucous membranes.**

**Special remarks on chronic effects on humans : Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.**

## **12. ECOLOGICAL INFORMATION**

**Biodegradable/OECD : Not applicable.**

**Mobility : Soluble in cold water, hot water.**

**Persistence/degradability : Not applicable, since inorganic substance.**

**Other adverse effects : Substances, which contribute to eutrophication: Nitrates.**

## **13. DISPOSAL CONSIDERATIONS**

**Waste disposal : The generation of waste should be avoided or minimized wherever possible.**

**Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. 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.**

**\*Consult your local or regional authorities**

## **14. TRANSPORT INFORMATION**

### **Classification**

**DOT/ IMDG/ IATA: UN number 1486**

**Proper shipping name : POTASSIUM NITRATE**

**Class : 5.1**

**Packing group : III**

**NAERG : 140**

**Label : UN/Other regulations**

**DOT**



### **Additional information**

**DOT : Limited quantity : Yes**

**Packaging instruction : Passenger aircraft : quantity limitation 25kg.**

**Cargo aircraft : quantity limitation 100kg.**

**Special provisions : A1, A29, IB 8, IP3**

**IATA : Passenger and Cargo aircraft : quantity limitation 25kg.**

**Cargo aircraft only : quantity limitation 100kg**

**Limited quantities-passenger aircraft : quantity limitation 10kg.**

## 15 . Other information

**Label requirements : OXIDIZER. MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS:  
MUCOUS MEMBRANES. CONTACT WITH ORGANIC MATERIAL  
MAY CAUSE FIRE.**

**Hazardous Material  
Information System (U.S.A.) :**

Health	1
Fire hazard	0
Reactivity	1
Personal protection	C

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



**References: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. -  
29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous  
Materials, UN#, Proper Shipping Names, PG.**

**Additional information : This product has been classified in accordance with the hazard criteria  
of the Controlled Products Regulations (CPR) and the MSDS contains  
all the information required by the CPR.**

### **Notice to reader**

**To the best of our knowledge, the information provided in this Product Information 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. Final determination of the suitability of any material is the sole responsibility of the  
user. All materials may represent unknown hazards and should be used with caution. Jurassic  
Products disclaims any liability for loss or damage resulting from the use of any data,  
information or recommendations set out in this Product Information Sheet.**



