

Material Safety Data Sheet
acc. to ISO/DIS 11014

Printing date 09/18/2006

Version: 3

Reviewed on 09/18/2006

1 Identification of substance

- **Product details**
- **Trade name:** Pokon leafshine
- **Article number:** T703
- **Application of the substance / the preparation** Plant, flower and/or garden care product
- **Manufacturer/Supplier:**
Pokon & Chrysal International BV
P.O. Box 5300
1410 AH NAARDEN
The Netherlands
Tel.: +31-(0)35-6955888
Fax: +31-(0)35-6955822
- **Information department:**
Department product registration, environment and safety
Contact: P. Herman
- **Emergency information:** Tel.: +31-(0)35-6955851

* **2 Composition/Data on components**

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

106-97-8	butane	10-25%
74-98-6	propane	10-25%
67-63-0	propan-2-ol	10-25%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard description:**



Extremely flammable

· **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

Extremely flammable.

May cause long-term adverse effects in the aquatic environment.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Keep out of the reach of children.

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· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0 - 4)**



· **WHMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	4	Fire = 4
REACTIVITY	3	Reactivity = 3

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove any clothing soiled by the product.
Immediately wash with water and soap and rinse thoroughly.
In case of complaints consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Seek medical treatment.
Do not induce vomiting.

5 Fire fighting measures

- **Suitable extinguishing agents:**
Water haze
Foam
Carbon dioxide
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** Mount respiratory protective device.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Person-related safety precautions:**
Keep away from ignition sources
Ensure adequate ventilation
Particular danger of slipping on leaked/spilled product.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.

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Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Use only in well ventilated areas.
Spilling or spraying on floors causes slippery floors with danger of slipping.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
Store in dry conditions.
Store receptacle in fume compartment.
Protect from heat and direct sunlight.
Protect from frost.
Keep out of reach of children.
- **Maximum storage temperature:** 40°C
- **Minimum storage temperature:** 4°C

8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

106-97-8 butane

REL 1900 mg/m³, 800 ppm

67-63-0 propan-2-ol

PEL 980 mg/m³, 400 ppm

REL Short-term value: 1225 mg/m³, 500 ppm

Long-term value: 980 mg/m³, 400 ppm

TLV Short-term value: 984 mg/m³, 400 ppm

Long-term value: 492 mg/m³, 200 ppm

BEI

· **Additional information:** The lists that were valid during the creation were used as basis.

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- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Do not inhale gases / fumes / aerosols.
Do not eat, drink, smoke or sniff while working.
Avoid contact with the eyes.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves:** Rubber gloves
- **Penetration time of glove material -**
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form: Aerosol
Color: Colorless
Odor: Alcohol-like

· **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Not applicable, as aerosol.

· **Flash point:** < 0°C (< 32°F)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Heating may cause an explosion.

· **Density at 20°C (68°F):** 0.669 g/cm³

· **Solubility in / Miscibility with**

Water: Insoluble.

· **Solvent content:**

Organic solvents: 82.67 %

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10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritation is possible.
- **on the eye:** Irritation is possible.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**



- **Hazard class:** 2.1
- **Identification number:** UN1950
- **Packing group:** -
- **Proper shipping name (technical name):** AEROSOLS, flammable

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· **Label** 2.1

· **Land transport ADR/RID (cross-border):**



· **ADR/RID class:** 2 5F Gases
 · **Danger code (Kemler):** 23
 · **UN-Number:** 1950
 · **Packaging group:** -
 · **Description of goods:** 1950 AEROSOLS

· **Maritime transport IMDG:**



· **IMDG Class:** 2
 · **UN Number:** 1950
 · **Label** 2.1
 · **Packaging group:** -
 · **EMS Number:** F-D,S-U
 · **Marine pollutant:** No
 · **Propper shipping name:** AEROSOLS

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 2.1
 · **UN/ID Number:** 1950
 · **Label** 2.1
 · **Packaging group:** -
 · **Propper shipping name:** AEROSOLS, flammable

15 Regulations

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

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· **TSCA (Toxic Substances Control Act):**

106-97-8 butane

74-98-6 propane

67-63-0 propan-2-ol

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Extremely flammable

· **Risk phrases:**

Extremely flammable.

May cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

Keep container tightly closed and in a well-ventilated place.

Do not breathe aerosol

Avoid contact with skin and eyes.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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Use only in well-ventilated areas.

· **Special labeling of certain preparations:**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	54.0

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Department product registration, environment and safety

· **Contact:** P. Herman

· * **Data compared to the previous version altered.**