


## 2-NITROFLUORENE

### 1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND THE COMPANY UNDERTAKING

<b>Chemical name:</b>	2-Nitrofluorene
<b>Product code:</b>	PPC-NF00
<b>Synonyms:</b>	–
<b>Recommended uses:</b>	For R&D purposes
<b>Supplier:</b>	Xenometrix AG, Gewerbestrasse 25, CH-4123 Allschwil, Switzerland
<b>Emergency contact numbers:</b>	Telephone: +41 61 482 14 34 Fax: +41 61 482 20 72

### 2. HAZARDS IDENTIFICATION

<b>Classification:</b>	According to regulation (EC) No 1272/2008
<b>Labelling and precautionary statements:</b>	Pictogram: 
<b>Hazard statement(s):</b>	Signal word: Warning. H302 Harmful if swallowed. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. H411 Toxic to aquatic life with long lasting effects.
<b>Precautionary statement(s):</b>	P202 Do not handle until all safety precautions have been read and understood. P273 Avoid release to the environment P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P281 Use personal protective equipment as required. P301 + P312 IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell. P308 + P313 IF exposed or concerned: Get medical advice/attention. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Molecular formula:</b>	C <sub>13</sub> H <sub>9</sub> NO <sub>2</sub>
<b>Molecular weight:</b>	211.22
<b>CAS Number:</b>	607-57-8
<b>EINECS Number:</b>	210-138-5

### 4. FIRST AID MEASURES

<b>Eye contact:</b>	Immediately flush eye with copious amounts of water for at least 15 minutes. Get medical aid immediately.
<b>Skin contact:</b>	In case of contact remove contaminated clothing and immediately wash affected areas with copious quantities of water and soap for

at least 15 minutes. Get medical aid immediately. Wash contaminated clothing before reuse.

**Inhalation:** Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen. Get medical aid.

**Ingestion:** Never give anything by mouth to an unconscious person. Wash out mouth with water provided person is conscious. Call a physician.

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## 5. FIRE-FIGHTING MEASURES

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**Extinguishing media:** In case of fire use water spray, dry chemical powder, carbon dioxide, or alcohol-resistant foam.

**Special hazards arising from the substance or mixture:** Carbon oxides, nitrogen oxides (NOx).  
Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions:** Use proper personal protective equipment as indicated in Section 8.  
Wear self-contained breathing apparatus, eye protection and gloves. Keep personal hygiene. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust, vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Environmental precautions:** Do not let product enter the drains.

**Spills/Leaks:** Sweep up and place the material in appropriate container for disposal and dispose of as hazardous waste. Ventilate area, clean up spills and wash spill site after material pickup is complete, observing precautions in the Protective Equipment section.

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## 7. HANDLING AND STORAGE

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**Handling:** Wear appropriate protective clothing - see Section 8. Wash hands and face thoroughly after handling. Use only under a chemical fume hood. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage:** Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from incompatible materials such as oxidizing agents. Light sensitive. Air-sensitive. Store under inert gas. Protect from light.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**Eye protection:** Wear appropriate protective safety glasses with side-shields conforming to EN166, chemical safety goggles or face-shield (min.

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	8-inch) as described by OSHA's eye and face protection regulations. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
<b>Skin protection:</b>	Wear appropriate protective gloves to prevent skin exposure, as defined in EU Directive 89/686/EEC and the standard EN 374 derived from it.
<b>Body protection:</b>	Appropriate protective clothing, overalls.
<b>Respiratory protection:</b>	Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N95 (US) or type P1 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Appearance:</b>	White to brown solid.
<b>Odour:</b>	Data not available / does not apply.
<b>Odour threshold:</b>	Data not available / does not apply.
<b>pH:</b>	Data not available / does not apply.
<b>Melting point:</b>	156–158°C.
<b>Boiling point:</b>	Data not available / does not apply.
<b>Flash point:</b>	Data not available / does not apply.
<b>Evaporation rate:</b>	Data not available / does not apply.
<b>Flammability:</b>	Data not available / does not apply.
<b>Flammability or explosive limits:</b>	Data not available / does not apply.
<b>Vapor pressure:</b>	Data not available / does not apply.
<b>Vapor density:</b>	Data not available / does not apply.
<b>Relative density:</b>	Data not available / does not apply
<b>Solubility:</b>	Soluble in the following materials: Benzene, Acetone, Acetic acid. Insoluble in Water.
<b>Partition coefficient</b>	3.83.
<b>n-octanol/water :</b>	Data not available / does not apply.
<b>Auto-ignition temperature:</b>	Data not available / does not apply.
<b>Decomposition temperature:</b>	Data not available / does not apply
<b>Viscosity:</b>	Data not available / does not apply

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## 10. STABILITY AND REACTIVITY

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<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Conditions to avoid:</b>	Data not available.
<b>Incompatibilities with other materials:</b>	Strong alkalis, oxidizing agents.
<b>Hazardous decomposition products:</b>	Carbon oxides, nitrogen oxides (NO <sub>x</sub> ).

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## 11. TOXICOLOGICAL INFORMATION

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<b>RTECS #:</b>	LL5075000.
<b>Acute toxicity:</b>	LD50 Intraperitoneal: mouse: 132 mg/kg.
<b>Skin corrosion/irritation:</b>	Data not available.
<b>Serious eye damage/eye irritation:</b>	Data not available.
<b>Respiratory or skin sensitization:</b>	Data not available.
<b>Germ cell mutagenicity:</b>	Data not available.
<b>Carcinogenicity:</b>	
<b>Rat:</b>	Oral: Tumorigenic: Neoplastic by RTECS criteria. Liver: Tumors. Skin and appendages: Other: Tumors.
<b>Rat:</b>	Oral: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Kidney, Ureter, Bladder: Tumors.
<b>Rat:</b>	Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.
<b>Mouse:</b>	Oral: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Liver: Tumors. Kidney, Ureter, Bladder: Tumors.
<b>Mouse:</b>	Skin: Tumorigenic: Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration: Tumors. Gastrointestinal: Tumors.
<b>Mouse:</b>	Implant: Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Kidney, Ureter, Bladder: Tumors. Tumorigenic: Tumors at site or application.
<b>Reproductive toxicity:</b>	Data not available.
<b>Specific target organ toxicity:</b>	Single exposure:           Data not available. Repeated exposure:       Data not available.
<b>Aspiration hazard:</b>	Data not available.
<b>Signs and symptoms of exposure:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.
<b>Target organs:</b>	Data not available.
<b>Potential health effects:</b>	Eye:                    May cause serious eye irritation. Skin:                   May be harmful by skin absorption. May cause skin irritation.  Ingestion:            Harmful if swallowed. Inhalation:           May be harmful if inhaled. May cause respiratory tract irritation.  Chronic:               No information found.

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## 12. ECOLOGICAL INFORMATION

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<b>Ecotoxicity</b>	Large or frequent spills may have hazardous effects on the environment
<b>Partition coefficient</b>	Log Pow: 3.83
<b>Other adverse effects</b>	Toxic to aquatic life with long lasting effects.

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## 13. DISPOSAL CONSIDERATION

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Observe all federal, state and local environmental regulations. Mix or dissolve the material in a combustible solvent and burn in chemical incinerator equipped with an afterburner and scrubber. Contact a licensed professional waste disposal service to dispose of this material.

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**14. TRANSPORT INFORMATION**

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**UN number:**

ARD / RID	3077.
IMD	3077.
IATA	Not classified as hazardous for transport
ICAO	3077.
ADN	3077.

**UN proper shipping name:**

ARD / RID	Environmentally Hazardous substance, Solid N.O.S.
IMD	Environmentally Hazardous substance, Solid N.O.S.
IATA	Not classified as hazardous for transport
ICAO	Environmentally Hazardous substance, Solid N.O.S.
ADN	Environmentally Hazardous substance, Solid N.O.S.

**Transport hazard class(es)**

ADR / RID class	9
ADR / RID class code	M7
ARD / RID label	9
IMDG class	9
ICAO class/division	9
AND class	9
Transport labels	

**Packing group**

ARD / RID	III
IMD	III
ICAO	III
ADN	III

**Environmental hazards**

Environmentally hazardous substance/marine pollutant

**Special precaution for user**

EmS	F-A, S-F
ADR transport category	3
Hazard Identification	
No.	90
Tunnel restriction code	(E)

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**15. REGULATORY INFORMATION**

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

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**16. ADDITIONAL INFORMATION**

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None.