

## MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & MANUFACTURER'S DETAILS	
PRODUCT NAME : 4-(2-Nitroanilino)pyridine	
MANUFACTURER	
FACTORY & REGISTERED OFFICE: Jubilant Organosys Limited, Bhartiagram, Gajraula District: Jyotiba Phuley Nagar Uttar Pradesh-244223 , India PHONE NO: +91-5924-252353 unto 252360 Contact Department-Safety: Extension 298 FAX NO : 91-5924-252352 EMERGENCY PHONE: +91-5924-268141	HEAD OFFICE: Jubilant Organosys Limited Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh-201301 India. PHONE NO: +91-120-2516601 Contact department: EHS FAX NO : +91-120-2516629 Email: <a href="mailto:support@jubl.com">support@jubl.com</a>

2. CHEMICAL IDENTIFICATION	
CHEMICAL NAME	: 4-(2-Nitroanilino)pyridine
SYNONYMS	: 4-(o-nitroanilino)pyridine,
SYSTEMATIC NAME	: Pyridine, 4-(o-nitroanilino)- (8CI) 4-Pyridinamine, N-(2-nitrophenyl)- (9CI)
CHEMICAL CLASSIFICATION	: Pyridine derivative
CHEMICAL FORMULA	: C <sub>11</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub>
C.A.S. NO	: 25551-59-1

3. HAZARD IDENTIFICATION & HEALTH HAZARD	
Overview: The full toxicological profile is not known. Care is to be taken to avoid direct contact with this material. Avoid disposal into environmental bodies.	
Eye : May cause eye irritation.	
Skin : May cause skin irritation.	
Ingestion : May cause gastrointestinal irritation with nausea and vomiting.. The toxicological profile of this chemical is not available.	
Inhalation : May causes respiratory tract irritation.	

4. FIRST AID MEASURES	
<b>Eyes Contact:</b> If material enters the eyes wash immediately with plenty of water for at least 15 minutes. Remove contact lenses if easy to do so. Seek medical help if irritation persists.	
<b>Inhalation:</b> Remove the person from the area and into fresh air. If the person is having difficulty breathing give oxygen. If the person is not conscious give artificial respiration. Seek prompt medical attention. Seek medical attention in case of any irritation.	
<b>Skin Contact:</b> In case of contact immediately wash with plenty of water. If any irritation arises call medical services.	

4. **FIRST AID MEASURES**

**Ingestion:** If swallowed do NOT induce vomiting. Seek medical attention.. Never give anything by mouth to an unconscious person. Give water to rinse out mouth if the person is fully conscious and attentive.

**Notes to physician:** Treat symptomatically and supportively.

5. **FIRE FIGHTING MEASURES**

**Flash Point:** >150<sup>0</sup>C. Solid melting at 99-101<sup>0</sup>C. This material is not flammable or combustible. Like any organic chemical it will burn in in fire conditions.

**Extinguishing media:** No restrictions. Dry chemical powder, carbon dioxide, or chemical foam, Avoid using water jets in a chemical fire as far as possible.

**Special fire fighting procedures:** As in any chemical fire, wear full protective gear and Self Contained Breathing Apparatus in the fire area.

**Unusual fire and explosion hazard:** Prevent run-off of fire water.

6. **ACCIDENTAL RELEASE MEASURES**

**General Information :** Wear suitable protective gear as in section 8.

**Spills / Leaks :**

- Collect dry in designated containers for disposal or recovery.
- Do not dispose into drains or environmental bodies.
- Follow local and federal laws applicable.

7. **HANDLING AND STORAGE**

**Handling :** These chemical is for research purposes. It must be handled under the supervision of research personnel.

**Storage :** Store in a cool dry place. Close container tightly after use.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure controls:** Always handle in a fume cupboard. Facilities using this material will have eye-bath and standard emergency showers.

**Personal Protection**

Hand: Always use impervious gloves.

Body: Standard laboratory clothing. Prevent all direct contact.

Eyes: Use chemical goggles and/or face shield.

Respiratory- If local exhaust ventilation is inadequate or absent can be considered. Always use an approved respirator as per an accepted respirator program. Wear a NIOSH/MSHA or European Standard EN 149 approved full-face piece airline respirator in the positive pressure mode with emergency escape provisions.

**Exposure Limits**

Not available.

## 9. PHYSICOCHEMICAL PROPERTIES & FIRE/ EXPLOSION HAZARD DATA

PHYSICAL STATE	: Solid
APPEARANCE	: Yellow powder
ODOUR	: Data not available
BOILING POINT	: Data not available
MELTING POINT	: 99-101 deg.
FLASH POINT	: Data not available
VAPOUR PRESSURE	: Data not available
SPECIFIC GRAVITY (WATER=1)	: Data not available
VAPOR DENSITY (AIR=1)	: Data not available
SOLUBILITY IN WATER	: Very slightly soluble
MOLECULAR WEIGHT	215.12

## 10. STABILITY AND REACTIVITY

**Stability:** Stable at normal temperatures and pressures. Protect from direct sunlight.  
**Conditions to avoid:** Heat, direct light, ignition sources, incompatible chemicals.  
**Incompatibilities:** Mineral acids, oxidizing agents.  
**Hazardous Decomposition Products:** In fire conditions may give out toxic and irritating fumes including nitrogen oxides, carbon monoxide and carbon dioxide.  
**Hazardous Polymerization:** Not reported.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE EFFECTS:

- Based on structural and chemical characteristics this chemical is likely to have a skin irritation effect.
- The toxicological profile of this chemical has not been tested.

**CHRONIC EFFECTS:** Not available

### TOXICITY:

- RTECS#: Not available
- ORL RAT LD<sub>50</sub> : Not available
- DERMAL LD<sub>50</sub> : Not available
- INHALATION LD<sub>50</sub> : Not available

### CARCINOGENICITY:

- Not listed by NTP, IARC, OSHA
- No data available

## 12. ECOLOGICAL INFORMATION

- No information available. Do not dispose into environmental bodies.
- Unlikely to biodegrade.

## 13. DISPOSAL CONSIDERATION

- Dispose as per local and federal laws applicable.

14. **TRANSPORT INFORMATION**

Not regulated by IMDG/IATA/ICAO/ADR/RID/US DoT

15. **REGULATORY INFORMATION**

**European Information:**

EC#: Not available. May be used for research purposes.

Pictogram: Xi

Risk Phrases

- R36/37/38 Irritating to eyes, respiratory system and skin.\

Safety Phrases

- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**US Regulatory Information**

- TSCA Inventory: Not listed. May be used for research purposes.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 25551-59-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**Canada DSL and NDSL list:**

- Not listed on the DSL and NDSL.

16.	<b>OTHER INFORMATION</b>
	<p>Information contained in this MSDS is believed to be correct but no representation, guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. This MSDS shall be used as a guide only. JUBILANT ORGANOSYS LIMITED makes no warranties expressed or implied of the adequacy of this document for any particular purpose.</p> <p>Document Name: 0296A00 Div 05 msds 4-(2-Nitroanilino)pyridine Date: January 10, 2006 Revision Number: 00</p>