### \*\*\* MATERIAL SAFETY DATA SHEET \*\*\*

## PARA NITRO ANILINE

# \*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: PARA NITRO ANILINE

Catalog Numbers:

12837-0000, 12837-0250, 12837-5000, 18069-0000, 18069-0050

Synonyms:

Company Identification (Europe): Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

Company Identification (USA): Acros Organics

One Reagent Lane

Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For information in Europe, call: 0032(0) 14575211

For emergencies in the US, call CHEMTREC: 800-424-9300 For emergencies in Europe, call: 0032(0) 14575299

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

+	 ++	+
CAS#	Chemical Name	%
EINECS#   Haz Symbols	Risk Phrases	
		-
100-01-6   PARA	+   NITRO ANILINE	02-810-1
	++	

Hazard Symbols: T

Risk Phrases: 23/24/25 33

\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*

# EMERGENCY OVERVIEW

Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eve:

May cause eye irritation. May result in corneal injury.

Causes

redness and pain.

Skin:

May cause skin irritation. Causes symptoms similar to those of inhalation. Toxic in contact with skin. May cause reddening of the

skin.

Ingestion:

May cause irritation of the digestive tract. Poison by ingestion.

May cause effects similar to those for inhalation exposure. May cause nausea and vomiting.

Inhalation:

May cause respiratory tract irritation. May cause methemoglobinemia,

cyanosis (bluish discoloration of skin due to deficient oxygenation

of the blood), convulsions, tachycardia, dyspnea (labored breathing),

and death. Toxic if inhaled. May cause nausea, dizziness, and headache.

Chronic:

Chronic exposure may cause liver damage. Chronic exposure may cause

blood effects.

### \*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids. Get medical  $\operatorname{\mbox{aid}}$ 

immediately.

Skin:

 $\label{eq:Get medical aid immediately. Immediately flush skin with plenty of$ 

water for at least 15 minutes while removing contaminated clothing

and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Get medical aid immediately. Remove from exposure and move to fresh

air immediately. If not breathing, give artificial respiration.

Ιf

breathing is difficult, give oxygen.

Notes to Physician:

Treat symptomatically and supportively.

\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\*

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. During a fire, irritating and highly toxic gases may be generated by

thermal decomposition or combustion.

Extinguishing Media:

Use water spray to cool fire-exposed containers. Use water spray,

dry chemical, carbon dioxide, or chemical foam.

\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*

General Information: Use proper personal protective equipment as indicated

in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Remove all sources of ignition.

\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*

Handling:

Wash thoroughly after handling. Do not breathe dust, vapor, mist, or

gas. Do not get in eyes, on skin, or on clothing. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous.

Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

Engineering Controls:

 $\label{eq:continuous} Facilities \ storing \ or \ utilizing \ this \ material \ should \ be \ equipped$ 

with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent

skin

exposure.

Clothing:

Wear appropriate protective clothing to prevent

skin

exposure.

Respirators:

Follow the OSHA respirator regulations found in

29

CFR 1910.134 or European Standard EN 149. Always

use

a NIOSH or European Standard EN 149 approved

respirator when necessary.

\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State: Powder

Color: yellow - ochre

Odor: pungent odor - faint odor - ammonia-like

pH: CA. 7 (sat.sol.)
Vapor Pressure: 1mmHg @142 deg C
Viscosity: Not available.
Boiling Point: 332 deg C @760mmHg
Freezing/Melting Point: 147 - 151 deg C

Autoignition Temperature: 510 deg C ( 950.00 deg F) Flash Point: 199 deg C ( 390.20 deg F)

Explosion Limits, lower: Not available. Explosion Limits, upper: Not available. Decomposition Temperature: 280 deg C

Solubility in water: 0.8 g/l (20?C)

Specific Gravity/Density:

Molecular Formula: C6H6N2O2 Molecular Weight: 138.13

\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*

Chemical Stability:

Stable.

Conditions to Avoid:

Incompatible materials, dust generation, moisture.

Incompatibilities with Other Materials:

Strong reducing agents, strong oxidizing agents, strong acids, bases.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide, sulfuric acid.

Hazardous Polymerization: Will not occur.

\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*

RTECS#:

CAS# 100-01-6: BY7000000

LD50/LC50:

CAS# 100-01-6: Dermal, guinea pig: LD50 = >500 mg/kg; Oral,

mouse:

LD50 = 810 mg/kg; Oral, rat: LD50 = 750 mg/kg.

Not available.

Carcinogenicity:

4-Nitroaniline -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*

Ecotoxicity:

log POW = 1.4

0ther

into

Avoid entering into waters or underground water. Do not empty

drains.

\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*

Dispose of in a manner consistent with federal, state, and local regulations.

### \*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*

IATA

Shipping Name: NITROANILINES

Hazard Class: 6.1 UN Number: 1661 Packing Group: II

IMO

Shipping Name: NITROANILINES

Hazard Class: 6.1 UN Number: 1661 Packing Group: II

RID/ADR

Shipping Name: NITROANILINES

Hazard Class: 6.1 UN Number: 1661 Packing group: II

USA RQ:CAS# 100-01-6: 5000 lb final RQ; 2270 kg final RQ

\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with

skin

and if swallowed.

R 33 Danger of cumulative effects.

R 52/53 Harmful to aquatic organisms, may cause

long-term adverse effects in the aquatic

environment.

Safety Phrases:

S 28A After contact with skin, wash immediately

with

plenty of water.

S 36/37 Wear suitable protective clothing and

gloves.

S 45 In case of accident or if you feel unwell,

seek

medical advice immediately (show the label where

possible).

S 61 Avoid release to the environment. Refer to

special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 100-01-6: 2

United Kingdom Occupational Exposure Limits

CAS# 100-01-6: OES-United Kingdom, TWA 6 mg/m3 TWA

United Kingdom Maximum Exposure Limits

#### Canada

CAS# 100-01-6 is listed on Canada's DSL List.

CAS# 100-01-6 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 100-01-6: OEL-ARAB Republic of Egypt:TWA 1 ppm (6 mg/m3);Skin

OEL-AUSTRALIA:TWA 3 mg/m3;Skin

OEL-BELGIUM: TWA 3 mg/m3; Skin

OEL-DENMARK: TWA 0.5 ppm (3 mg/m3); Skin

OEL-FINLAND: TWA 1 ppm (6 mg/m3); STEL 3 ppm (18 mg/m3); Skin

OEL-FRANCE: TWA 3 mg/m3; Skin

OEL-GERMANY:TWA 1 ppm (6 mg/m3);Skin

OEL-HUNGARY: TWA 3 mg/m3; STEL 6 mg/m3; Skin

OEL-THE NETHERLANDS: TWA 1 ppm (6 mg/m3); Skin JAN9

OEL-THE PHILIPPINES:TWA 1 ppm (6 mg/m3); Skin JAN9

OEL-RUSSIA: STEL 0.1 mg/m3; Skin

OEL-SWITZERLAND: TWA 0.5 ppm (3 mg/m3); Skin

OEL-TURKEY: TWA 1 ppm (6 mg/m3); Skin

OEL-UNITED KINGDOM: TWA 1 ppm (6 mg/m3); STEL 2 ppm; Skin

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

## US FEDERAL

**TSCA** 

CAS# 100-01-6 is listed on the TSCA inventory.

\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 7/16/1996 Revision #2 Date: 12/13/2002

The information above is believed to be accurate and represents the best

information currently available to us. However, we make no warranty of

merchantability or any other warranty, express or implied, with respect to

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should make their own investigations to determine the suitability of the

information for their particular purposes. In no way shall the company be

liable for any claims, losses, or damages of any third party or for lost  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right)$ 

profits or any special, indirect, incidental, consequential or exemplary

damages, howsoever arising, even if the company has been advised of the possibility of such damages.

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