

*Committed to Service and innovation*

**MATERIAL SAFETY DATA SHEET**

**MSDS # PMC/RC/022/06**

**Updated on** 02 - Jan - 2006  
**Product Name** ACCINOX 100  
**Revision Number** +REV 08  
**UN Number** 3077  
**CAS No.** 68953 - 84 - 4

<b>Health Hazard :</b>	<b>1</b>
<b>Fire Hazard :</b>	<b>1</b>
<b>Reactivity :</b>	<b>0</b>
<b>Personal Protection :</b>	<b>X</b>

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

**PRODUCT NAME:** ACCINOX 100

**Address/Phone No :** PMC Rubber Chemicals India Private Limited  
Works & Registered Office:  
103 G T Road West  
PO: Rishra 712248, Dist : Hooghly  
West Bengal, India  
Tel : +91 33 26722515, Fax : +91 33 26721552

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>PRODUCT DESCRIPTION</b>	<b>CAS No</b>	<b>Symbol</b>	<b>R Phrases</b>
Diaryl-p-phenylenediamine mixture	68953 - 84 - 4	Xi, N	R43, 50/53

<b>HAZARDOUS INGREDIENT(S)</b>	<b>CAS No.</b>	<b>%(w/w)</b>
Diphenylamine	122-39-4	< 5
Aniline	62-53-3	< 0.1
O-Toluene	95-53-4	< 0.1

**3. HAZARDS IDENTIFICATION**

This health hazard assessment is based on a consideration of the composition of this product.

Irritant to skin, eyes and respiratory tract

May cause sensitisation by skin contact (some clinical evidence of skin sensitisation has been reported but few problems have been encountered in use)

When ignited on open flame, this product will burn.

Primary routes of entry : Dermal contact and inhalation.

Short term exposure : See: OTHER INFORMATION

Long term exposure : See: OTHER INFORMATION

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

- Inhalation Remove patient from exposure.  
Obtain medical attention if ill effects occur.
- Skin Contact Remove contaminated clothing.  
Wash skin with plenty of soap and water.  
If symptoms (irritation or blistering) occur obtain medical attention.  
Contaminated clothing should be laundered before re-issue.
- Eye Contact Irrigate with eyewash solution or clean water, holding the eyelids  
apart, for at least 10 minutes. Obtain medical attention.
- Ingestion Do not induce vomiting.  
Wash out mouth with water and give 200-300 ml (half a pint) of  
water to drink. Obtain medical attention.

#### **Further Medical Treatment**

Symptomatic treatment and supportive therapy as indicated.

#### **5. FIRE-FIGHTING MEASURES**

Combustible.

Combustion or thermal decomposition will evolve very toxic, irritant and  
extremely flammable vapours.

Protect from sparks (dust explosion risk)

Combustion products: Nitrogen oxides, carbon monoxide, carbon dioxide

Extinguishing Media: Water spray, foam, dry powder or CO<sub>2</sub>.

Fire Fighting Protective Equipment A self contained breathing apparatus and suitable  
protective clothing should be worn in fire conditions.

#### **6. ACCIDENTAL RELEASE MEASURES**

Do not allow to enter drains, sewers or watercourses.

Clear up spillages.

Transfer to a container for disposal or recovery.

Ensure suitable personal protection during removal of spillages.

## 7. HANDLING AND STORAGE

### 7.1 HANDLING

Avoid contact with skin and eyes.

### 7.2 STORAGE

Keep away from oxidising agents, acids, alkalis, moisture and direct sunlight.  
Suitable containers: High density polyethylene (HDPE) laminated paper bags with polythene liner inside.

Storage Temperature: Store below 50<sup>0</sup>C, away from moisture and strong oxidising agents. Avoid dust formation (explosion risk).

Storage Life 1 year(s)

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear suitable gloves and eye/face protection.

### Occupational Exposure Limits

No Occupational Exposure Limit listed but 2.5 mg/m<sup>3</sup> for total dust is recommended

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Flakes (staining)
Colour	Dark brown
Odour	Amine
pH (Value)	No data.
Boiling Point (Deg C)	No data.
Melting Point (Deg C)	90 (minimum)
Flash Point (Deg C)	No data.
Flammable Limits	No data.
Auto Ignition Temp (°C)	No data
Explosive Properties	Not applicable.
Oxidising Properties	No data.
Vapour Pressure (Ps)	No data.
Solubility (Water)	Insoluble
Solubility (Other)	Soluble in toluene
Specific Gravity	1.2 @ 25°C

## 10. STABILITY AND REACTIVITY

Incompatible materials oxidising agents, acids and alkalis

Hazardous Reactions : None known.

Hazardous Decomposition Product(s) : Oxides of Carbon and Nitrogen

## 11. TOXICOLOGICAL INFORMATION

This health hazard assessment is based on a consideration of the composition of this product.

Acute Oral LD50 (Rat) >2370 mg/kg

Inhalation Combustion will evolve very toxic and irritant vapours.

Skin Contact May cause sensitisation by skin contact.  
See: Other information

Eye Contact May cause irritation. If irritation persists, seek medical advice

Ingestion Ingestion may cause irritation of the gastrointestinal tract.

Mutagenic in the Ames test .

Long Term Exposure : See other information

## 12. ECOLOGICAL INFORMATION

Acute Fish Toxicity	96 hr LC50 Rainbow Trout	> 0.48 mg/l
	48 hr EC50 Daphnia Magna	>1.8 mg/l
Acute Algae Toxicity	96 hr EC50 Algae	> .20 mg/l
Octanol/Water Coefficient	Log P =	4.0

Persistence and degradability Not readily biodegradable

## 13. DISPOSAL CONSIDERATIONS

Disposal (Incinerate/treat or landfill) should be in accordance with local, state or national legislation.

#### 14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport, supply and use.

UN No : 3077

Class : 9

Packing Group : III

Environmentally hazardous substance, Solid, N.O.S., (Contains diphenylamine)

Marine Pollutant Not classified as a Marine Pollutant

#### 15. REGULATORY INFORMATION

EC Classification: Irritant, Hazard Symbol Xi



Dangerous for the Environment, N



Risk Phrases R43 May cause sensitisation by skin contact.  
R50/53 Very toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Safety Phrases S24 Avoid contact with skin.  
S36 Wear suitable protective clothing.  
S60 This material and/its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

#### 16. OTHER INFORMATION

Use : Antioxidant/antiozonant for rubbers

Other Information:

Listed by the International Contact Dermatitis Group for routine skin patch testing in appropriate circumstances.

In animal feeding studies, diphenylamine at 1% (10,000 ppm) of the diet, has been reported to effect the heart, blood, bladder and kidney.

The concentration of the residual monomers are less than 0.1%. At this concentration, this product is not regulated as a potential carcinogen by the OSHA Hazard Communication Standard or the WHMIS legislation.

---

*Committed to Service and innovation*

HMIS rating: Health: 1  
Flammability: 1  
Reactivity: 0  
PPI: X

Legend : 0(HMIS) Minimal hazard  
1(HMIS) Slight hazard  
2(HMIS) Moderate hazard  
3(HMIS) Serious hazard  
4(HMIS) Severe hazard  
X(HMIS) Personal protective rating to be supplied by user  
depending on the use conditions

Information in this publication is believed to be accurate and is given in good faith, but it is for the Customer to satisfy itself of the suitability for its own particular purpose. Accordingly, PMC Group Rubber Chemicals gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent of such exclusion is prevented by law. The trade mark "ACCINOX" is registered in the name of ICI India Limited and assigned to : PMC Rubber Chemicals India Private Limited.