



MATERIAL SAFETY DATA SHEET

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION :

Chemical Name : GASOLINE ANTIOXIDANT

Company Identification :

Ratnagiri Chemicals Pvt. Ltd.

Head Office: 611/612 Raheja Arcade, Sector 11,
CBD Belapur, Navi Mumbai – 400614.
Maharashtra, INDIA

Tel Nos +91-22-2757 0191

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Factory: C-39, MIDC Lote-Parshuram Indl Area
Lote - 415722

Maharashtra, INDIA

Tel Nos +91-2356-272650

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Section 2 – COMPOSITION, INFORMATION ON INGREDIENTS :

Product Description :

The product is a combination of Aromatic Diamines and sterically hindered phenols type antioxidant, which acts as high performance antioxidant, and prevents gum formation in gasoline.

<u>Sr.No</u>	<u>INGREDIENT</u>	<u>CAS NO</u>	<u>WT %</u>
01	N,N'-di-sec-butyl-p- Phylenediamine	101-96-2	50- 75%
02	Mixed Tert-Butyl phenols	60083-44-5	25- 50%

Section 3. HAZARD IDENTIFICATION:

Emergency Overview : May be corrosive to skin and eyes. May be harmful if ingested. May cause sensitization by skin contact.

Repeated or prolonged exposure may irritate the respiratory system. This product can burn and give off toxic vapors in a fire.

Potential Health Effects :

Primary Routes of Exposure : Contact with skin, eyes and product vapor inhalation. Product ingestion is unlikely to occur if proper safety/hygiene procedures are followed.

Skin Contact : May cause skin burns. Contains a component which is a known or suspected skin sensitizer.

Eye Contact : May be corrosive to the eye.

Ingestion : May be harmful if swallowed.

Inhalation : Inhalation of product vapors or mist may cause irritation of the respiratory system.

Target Organ : This product may be corrosive to any tissue; this includes the skin, eyes and mucous membranes.



Carcinogenicity Classification:

International Agency for Research on Cancer (IARC)

Neither the product nor the components are classified.

U. S. National Toxicology Program (NTP)

Neither the product nor the components are classified.

U. S. Occupational Safety and Health Administration (OSHA)

Neither the product nor the components are classified or regulated.

American Conference of Governmental Industrial Hygienists (ACGIH):

Neither the product nor the components are classified.

Section 4. FIRST AID INFORMATION:

Skin Contact : REMOVE FROM SKIN EMERGENCY. Take off all contaminated clothing immediately. Remove adhering matter immediately. Use waterless hand cleaner. Then wash with lots of water and soap. Consult a physician.

Eye contact : Flush immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

After Ingestion : Do not induce vomiting. Call a physician immediately.

After Inhalation : Remove affected person to fresh air. If symptoms persists, call a physician.

Note to physician : In the unlikely event that large quantities of the product are ingested, gastric lavage should be considered.

Aspiration into the lungs may cause chemical pneumonia. An activated charcoal slurry taken within 30 minutes of product ingestion may reduce the toxicity of the chemical. A 5:1 ratio of charcoal to material ingested is the recommended dosage. Activated charcoal should not be considered as an antidote; normal symptomatic treatment is recommended with or without the administration of activated charcoal. Symptomatic treatment is advised.

Section 5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media : Water spray, foam, dry chemical or CO₂

Unsuitable Extinguishing Media : Do not use a solid water stream as it may scatter and spread fire.

Fire and Explosion Hazards : Cool containers / tanks with water spray. In the event of fire and/or explosion do not breath fumes. Heating/burning can release hazardous gases: Carbon oxides (CO, CO₂), nitrogen oxides (NO_x)

Special protective equipment : Wear protective clothing. In case of respirable dust and/or fumes, use self-contained breathing apparatus.

Flash Point : 235 OF (113 OC)

Section 6. ACCIDENTAL RELEASE MEASURES:

Personal protection : See Section 8.

Environmental precautions : Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration

Clean-up : Remove all sources of ignition. Stop leak at source. Keep people away from and upwind of spill/leak. Contain material using temporary measures such as



sand bags, booms or adsorbent socks. Soak up with inert absorbent material (e.g. sand, silica gel, universal binder, sawdust). Never use spilled product.

Spilled product should be disposed of in accordance with all applicable government regulations.

Small amounts : Soak up with inert absorbent material and dispose of in accordance with applicable regulations.

Section 7. HANDLING AND STORAGE:

Handling : Use only in well-ventilated areas. Wear personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage : Keep containers tightly closed in a cool, well-ventilated place. Store in original container. Keep away from heat and sources of ignition.

Section 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

Engineering measures : Ensure adequate ventilation, especially in confined areas.

Personal protection equipment : Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

Eye protection : Tightly fitting safety goggles. Face-shield.

Hand protection : Solvent-resistant gloves.

Skin and body protection : Solvent-resistant apron and boots. Protective suit. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment with filter classification : N-95 or if oil/liquid aerosols are present P-95 (42 CFR 84). Gas adsorbent cartridge type: Organic fumes.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES:

These data do not represent technical or sales specifications.

Form	: Liquid	Color	:	Clear Red
Flash Point	: Min 141 °C	Viscosity @ 40°C cSt	:	8 - 14
Pour Point °C	: Below -18	Sp. Gr. @ 20 °C	:	0.890 – 0.950

Section 10. STABILITY:

Stability : Stable at normal conditions. Decomposes on heating.

Hazardous Decomposition Products : No decomposition if used as directed. Under conditions giving incomplete combustion, hazardous gases produced may consist of carbon oxides (CO, CO₂) and nitrogen oxides (NO_x).

Conditions/materials to avoid : Keep away from ignition sources. Incompatible with oxidizing and reducing agents. May corrode base metals.

Section 11. TOXICOLOGICAL INFORMATION

Acute toxicity :

LD50 oral rat	: NDA	LD50 dermal rat	:	NDA
LD50 dermal rabbit	: NDA	LC50 inhalation rat	:	NDA



Chronic toxicity : Classification of Ingredients
EEC carc.cat. : Not listed EEC muta.cat. : Not listed
EEC repr.cat. : Not listed

IARC classification : Not listed

Routes of exposure : Exposure may occur via inhalation, contact with skin and eyes.

Irritation : Skin (rabbit) : Severe skin irritation. Eye (rabbit): Severe eye irritation.

Additional product information : Avoid repeated and prolonged exposure.

Additional component information :

For the N,N-di-sec-butyl-phenylenediamine component:

LD50 Oral : 200-500 mg/kg

LD50 Dermal = > 2000 mg/kg

Corrosive to skin.

Corrosive to eye.

Not mutagenic in Ames Test.

For the Mixture of Butylphenols component.

LD50 Oral = 3400 – 5000 mg/kg.

Moderate skin irritant.

Section 12. ECOLOGICAL INFORMATION

Mobility : NDA

Biodegradation : NDA

Bioaccumulation : NDA

Aquatic toxicity : NDA

Further toxicity : NDA

Section 13. DISPOSAL INFORMATION

Provisions relating to waste: EPA – Resource Conservation and Recovery Act (RCRA) Hazardous and Solid Waste Management Regulations.

Disposal Information: Dispose of in compliance with all applicable regulations. Can be incinerated, when in compliance with the local regulations. Empty remaining contents. Do not reuse empty containers.

This product (in its fresh unused state) is not listed by generic name or trademark name in the U.S. EPA's RCRA regulations and does not possess any of the four identifying characteristics of hazardous waste (ignitibility, corrosivity, reactivity or toxicity).

Section 14. TRANSPORTATION INFORMATION:

Proper shipping name : Corrosive Liquid, basic, organic, N. O. S. (Contains N,N-di-sec-butyl-p-phenylenediamine)

UN NO : 3267

Packing Group : III

U. S. DOT : Regulated

DOT Shipping name : Corrosive Liquid, basic, organic, N. O. S. (Contains N,N-di-sec-butyl-p-phenylenediamine)

Hazard Classification : Class 8

IMO : Class 8

EmS : No. 8-15

MFAG : Table No. 760 Marine Pollutant : No

ICAO – IATA : Class 8

Instruction "passenger" : 818/Y818 Instruction "cargo" : 820

Section 15. REGULATORY INFORMATION:

Toxic substances Control Act (TSCA):

All the ingredients of this mixture are registered on the TSCA Chemical Substance Inventory.



CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) Reportable Quantity):

The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ): None.

SARA Title III (Superfund Amendments and Reauthorization Act of 1986)

Section 302 (Extremely Hazardous Substances): The following component(s) of this product is/are subject to the emergency planning provisions of 40 CFR 355 when there are amounts equal to or greater than the Threshold Planning Quantity (TPQ): None.

Section 313 (Toxic Chemicals): The following component(s) have been specified as Toxic Chemicals under SARA Section 313 and may be subject to the Toxic Release inventory (TRI) reporting requirements under 40 CFR 372 : None.

The following components are listed in U. S. State Regulations:

State Reg Reference : California – Proposition 65 : None.

Massachusetts Right-To-Know : N,N-Di-sec-butyl-p-phenylenediamine

New Jersey Right-To-Know : None.

Pennsylvania Right-To-Know : 1,4-Benzenediamine, N,N-bis(1-methylpropyl)

Canada

Canadian Hazardous Products Act :

This product is classified as a corrosive material – Class E

This product is classified as a material causing other Toxic Effects, Chronic Toxic Effects – Class D, Division 2 Subdivision B.

The above classification(s) is/are in accordance with the regulations pursuant to the Federal Hazardous Products Act (e.g. WHMIS)

Canadian Environmental Protection Act. : All the ingredients of this mixture are notified to CEPA and on the DSL (Domestic Substances List)

European Union (EU)

European Inventory of Existing Commercial Chemical Substances :

All components of this product are included in EINECS/ELINCS.

Council of European Communities Directive on Classification, Packing and Labeling of Dangerous Substance/Preparation (67/548/EEC and 88/379/EEC)

The following label information applies.

Symbols : C – Corrosive

Contains : N,N-di-sec-butyl-p-phenylenediamine

Risk Phrases : R22 Harmful if swallowed.

R35 Causes severe burns.

R43 May cause sensitization by skin contact.

Safety Phrases :

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash with plenty of waterless handcleaner.

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



Section 16. OTHER INFORMATION

For additional information concerning this product, contact the following:

PRODUCT EMERGENCIES

RATNAGIRI CHEMICALS PVT LTD

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The data and recommendations presented in this data sheet concerning the use of our product and the materials contain there in are believed to be accurate and are based on information which is considered reliable as of the date hereof. However, the customer should determine the suitability of such material for his purpose before adopting them on a commercial scale. Since the use our products by others is beyond our control, no guarantee, express or implied, is made and no responsibility assumed for the use of this material or the results to be obtained there from. Information on this form is furnished for the purpose of compliance with Government Health and Safety Regulations and shall not be used for any other purposes. Moreover, the recommendations contained in this data sheet are not to be construed as a license to operate under, or a recommendation to infringe, any existing patents, nor should they be confused with state, municipal or insurance requirements, or with national safety codes.
