



MERCHEM LIMITED

SAFETY DATA SHEET

MERETARD A
MSDS No. 35/20.03.2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name Meretard A
Synonym N-Nitrosodiphenylamine;
N-Nitroso-N-phenyl- aniline; N-Nitroso-N-phenylbenzeneamine

1.2 Use of the Substance/Mixture

Identified uses Retarder for Rubber vulcanization

1.3 Manufacturer or supplier's details

Company/Undertaking identification address Merchem Limited
Grove Centre,
44- Development Plot,
Kalamassery,
Cochin – 683 109, Kerala, India
Telephone + 91-484-4089300
Telefax + 91-484-4089310
E mail mail@merchem.com

1.4 Emergency Telephone Number

Emergency Telephone Number + 91-484-4089300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to EU directives 67/548/EEC or 1999/45/EC

R22
R36

Classification according to regulation (EC) No. 1272/2008 (EU/GHS-CLP)

Acute toxicity, Oral (Category 4)
Eye irritation (Category 2A)

EC Number: 201-663-0

Annex 1 Index Number: Not available

2.2 Label elements

Product Name: MERETARD A



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Hazard pictograms



Signal Word: Warning

Hazard Statements

H302-Harmful if swallowed.
H319 Causes serious eye irritation..

Precautionary statement – Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statement – Response

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330 - Rinse mouth
P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313-If eye irritation persists: Get medical advice/attention.

Precautionary statement – Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Precautionary statement – disposal

- P501 - Dispose of contents/container to an approved incineration plant

2.3 Other hazards

None

Note : For the full text of the R phrases and symbols mentioned in this Section, see Section 16

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical description: N-Nitrosodiphenylamine

Composition/Information on ingredients

Chemical Name	CAS No.	EC No.	Annex-1 Index No.	Weight %
N-Nitroso-diphenylamine	86-30-6	201-663-0	--	>95

3.2 Mixtures

Not applicable .



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SECTION 4: FIRST AID MEASURES

4.1 Description of first-aid measures

General Advice	Treatment should be directed at preventing absorption, administering to symptoms as they occur, and providing supportive therapy.
Eye Contact	In case of contact or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately
Skin Contact	In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse. Remove contaminated shoes and discard. If irritation persists or signs of toxicity occur, seek medical attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention
Ingestion	Get medical attention! Never give fluids or induce vomiting if the victim is unconscious

4.2 Most important symptoms and effects, both acute and delayed

- No further relevant information available

4.3 Indication of immediate medical attention and special treatment needed

- No information available

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide
Extinguishing media, which must not be used for safety reasons	No data available

Specific hazards arising from the substance or mixture

Specific hazards:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
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Specific methods:	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings, keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so.
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5.2 Protective Equipment and Precautions for Firefighters

Fire fighters should wear full impervious protective clothing, including self-contained breathing equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate the danger area, observe emergency procedures
- Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- Wear respiratory protection (P3 filter respirator for toxic particles)
- Wear suitable protective clothing, gloves and eye/face protection

6.2 Environmental precautions

- Remove immediately adhering matter
- Prevent product from entering drains
- Do not flush into surface water or sanitary sewer system

6.3 Methods and materials for containment and cleaning up

- Cover drains. Collect, bind, and pump off spills.
- Observe possible material restrictions (see sections 7.2 and 10.5)
- Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations

6.4 Reference to other sections

See section 7,8 &13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

- Handling is performed in a well ventilated place
- Wear suitable protective equipment
- Avoid breathing dust; if exposed to high dust concentration, leave area immediately.
- Keep away from heat/sparks/open flame/hot surfaces
- Keep away from food and smoking materials. Good hygienic practices should be observed.
- Wash hands before eating, drinking, or using the toilet. Work clothes should be washed separately at the end of each work day.
- Do not reuse this container. Reclose containers of unused product. Keep containers tightly closed when not in use.
- Take measures to prevent the build- up of electrostatic charge. Avoid shock and friction

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed. Store in a cool and dark place



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- Do not store near acids and oxidizing agents
- Keep away from heat and sources of ignition
- Store in a cool, dry, well-ventilated area.
- Store locked up
- Avoid exposure to direct sunlight.
- Be sure not to give the container unexpected impacts, such as falling down or falling off

7.3 Specific end uses

No further relevant information available.

SECTION 8: EXPOSURE CONTROL/PERSONNEL PROTECTION

8.1 Control parameters

Occupational exposure limit values

No data available

8.2 Exposure controls

Engineering Controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Install a closed system or local exhaust. Also install safety shower and eye bath.
See section 7.1

Personal Protective Equipment:

Eye/face Protection

Safety goggles. A face-shield, if the situation requires.

Skin Protection

Impervious protective clothing. Protective boots, if the situation requires. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Hand Protection

Nitrile, Neoprene and natural rubber gloves as per specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it.

Respiratory Protection

Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.

Environmental exposure controls

Prevent product from entering drains. Do not contaminate surface water. Avoid subsoil penetration .



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Solid
Color	yellow to orange brown
Odor	Characteristic
Boiling point/Range	268°C / 514°F
Melting point/Range	67°C/152°F
Flash Point	163.4°C / 326°F
Flammability	Flammable
Auto-ignition temperature	Not self-igniting
Explosive properties	No data available
Explosion Limit	No data available
Oxidizing properties	No data available
Vapor pressure	13.3Pa/25°C
Density	1.23 g/cm ³
Solubility in water	Insoluble (35.10mg/L 25°C)
Solubility in other solvents	Soluble in : Methanol, Acetone, Xylene, 1,2-Dichloro ethane, Carbon disulfide. Slightly soluble in: Ethanol
pH	No data available
Partition coefficient (n-Octanol-water)	Log Pow: 3.13
Relative vapor density	No data available
Viscosity	No data available

9.2 Other information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

- See Incompatible Materials. May explosively decompose on heating, shock, friction, etc

10.2 Chemical Stability

- Stable under recommended storage and handling conditions (See section 7)

10.3 Possibility of hazardous reactions

- See Incompatible Materials

10.4 Conditions to Avoid

- Air sensitive. Keep containers tightly closed
- Keep away from heat, direct sunlight, and sources of ignition (sparks and flame), shock, or friction

10.5 Incompatible materials to avoid



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- Contact with air
- Oxidizing agents

10.6 Hazardous Decomposition Products

- Heating or fire can release toxic gas
 - Carbon monoxide
 - Carbon dioxide
 - Oxides of Nitrogen

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	(LD50/oral/rat):1825 mg/Kg
Acute dermal toxicity	(LD50/dermal/rabbit):7940 mg/Kg
Acute inhalational toxicity:	No data available
Eye irritation:	Can irritate with possible eye damage Eye-rabbit mild eye irritation
Skin irritation/Sensitization:	May cause an allergic skin reaction
Mutagenic Effects (Germ cell mutagenicity)	dnd-hmn-fbr 3 mmol/L mmo-sat 2500 mg/L/72H (+/-S9) hma-mus-esc 3 g/kg
Reproductive toxicity:	No data available
Carcinogenic effects:	Carcinogenicity - rat - Oral Tumorigenic:Carcinogenic by RTECS criteria. Kidney, Ureter,Bladder:Tumors. Carcinogenicity mouse - Skin Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Bronchiogenic carcinoma. Tumorigenic:Increased incidence of tumors in s usceptible strains. Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Liver:Tumors. Endocrine:Tumors. Carcinogenicity - mouse - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Kidney, Ureter, Bladder:Tumors.
Target Organ Effects:	Long term exposure may affect the liver and kidneys
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	



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No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) 5.8 mg/l - 96 h

Toxicity to daphnia and other aquatic

Invertebrates

LC50 - Daphnia magna (Water flea) – 7.8 mg/l - 48 h

12.2 Mobility in soil

No data available

12.3 Persistence and degradability

No data available

Bioaccumulative Potential

Bioaccumulation Lepomis macrochirus (Bluegill) - 14 d -0,00921 mg/l
Bioconcentration factor (BCF): 217

12.4 Results of PBT and vPvB assessment

No data available

12.5 Other adverse effects

No data available

12.6 Other information

Do not allow to run into surface waters, wastewater, or soil.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber

Packing

Dispose of as unused product.



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SECTION 14: TRANSPORT INFORMATION

14.1 Road transport (ADR)

ADR/RID Class	9
UN-No	UN3077
Packing Group	III
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s (N-Nitrosodiphenylamine)

14.2 Sea transport (IMDG/IMO)

Class	9
UN-No	UN 3077
Packing Group	III
Marine pollutant	No
EMS	F-A, S-F
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s (N-Nitrosodiphenylamine)

14.3 Air transport (IATA)

Class	9
UN-No	3077
Packing Group	III
Proper Shipping Name	Environmentally hazardous substance, solid, n.o.s (N-Nitrosodiphenylamine)

14.4 Other information

No data available

14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.

14.6 Special precautions for user

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant



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SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation 1907/2006 REGULATION (EC) No 1272/2008
Classification according to EU directives 67/548/EEC or 1999/45/EC
Regulation (EC) No. 1272/2008

15.2 Chemical Safety Assessment

No data available

SECTION 16: OTHER INFORMATION

Issue No.	2
Issue date	20.03.2015
Revision No.	0
Reason for revision	Reviewed & revamped based on the guide lines of Regulation (EC) No 1907/2006

List of relevant R(isk)-phrase(s)

R22 - Harmful if swallowed
R36 - Irritating to eyes

Training advice

Provide adequate information, instruction and training to operators.

Further information for the material safety data sheet

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release.

End of Material Safety Data Sheet