

CAS-No.: 97-02-9 MSDS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. Product form : Substance : EC Index-No. : 612-040-00-1 EC-No. : 202-553-5 CAS-No. : 97-02-9 : 03437 Product code Formula : C6H5N3O4 Chemical structure NH_2 NO₂ NO₂ Synonyms : 2,4-Dinitrobenzenamine 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. **Relevant identified uses** Industrial/Professional use spec : Industrial For professional use only 1.2.2. Uses advised against No additional information available Details of the supplier of the safety data sheet 1.3. Labogens Fine Chem Industries 1st Floor, Above Bank of India, Guru Vihar, Rahon Road, Ludhiana Pb. (141007) +91 9316777775, +91 7707855700 sales@labogens.com - www.Labogens.com 1.4. **Emergency telephone number** Emergency number : +91 7707855700 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H300 Category 1 Acute toxicity (dermal), H310 Category 1

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Acute toxicity (inhal.), H330 Category 2 Specific target organ H373 toxicity — Repeated exposure, Category 2 Hazardous to the aquatic H411 environment — Chronic Hazard, Category 2

Full text of H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] T+; R26/27/28 N; R51/53 R33 Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

Label elements 2.2.

Labelling according to Regulation (EC	;) No. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS06 GHS08 GHS09
Signal word (CLP)	: Danger
Hazard statements (CLP)	 H300+H310+H330 - Fatal if swallowed, in contact with skin or if inhaled H373 - May cause damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	 P260 - Do not breathe vapours, spray, dust, fume, gas. P264 - Wash hands, forearms and face thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P284 - Wear respiratory protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

2.3. **Other hazards**

No additional information available

SECTION 3: Composition/information on ingredients		
3.1. Substances		
Name	: 2,4-DINITRO ANILINE FOR SYNTHESIS	
CAS-No.	: 97-02-9	
EC-No.	: 202-553-5	
www.Labogens.com	31/05/2016	2/11

Safety Data Sheet

EC Index-No.

: 612-040-00-1

Full text of R- and H-statements: see section 16

3.2. Mixtures	
Not applicable	
SECTION 4: First aid measures	
4.1. Description of first aid measu	Ires
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Immediately call a POISON CENTER/doctor. Gently wash with plenty of soap and water. Take off immediately all contaminated clothing.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms an	nd effects, both acute and delayed
Symptoms/effects after skin contact	: Fatal in contact with skin.
Symptoms/effects after ingestion	: Fatal if swallowed.
4.3. Indication of any immediate n	nedical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from	the substance or mixture
No additional information available	
5.3. Advice for firefighters	
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measu	ures
6.1. Personal precautions, protec	tive equipment and emergency procedures
6.1.1. For non-emergency personne	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
	ects.
Toxic to aquatic life with long lasting effe	
 6.2. Environmental precautions Toxic to aquatic life with long lasting effe 6.3. Methods and material for con Methods for cleaning up 	
Toxic to aquatic life with long lasting effe6.3.Methods and material for con	tainment and cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as

Safety Data Sheet

SECTION 7: Handling and storage 7.1. **Precautions for safe handling** Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. : Do not eat, drink or smoke when using this product. Wash hands and other exposed Hygiene measures areas with mild soap and water before eating, drinking or smoking and when leaving work. 7.2. Conditions for safe storage, including any incompatibilities Storage conditions : Store in a well-ventilated place. Keep container tightly closed. 7.3. Specific end use(s) No additional information available **SECTION 8: Exposure controls/personal protection Control parameters** 8.1.

No additional information available

Exposuro controls

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8.2. Exposure controls	
Hand protection	: Protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: [In case of inadequate ventilation] wear respiratory protection.
SECTION 9: Physical and chemical prop	perties
9.1. Information on basic physical a	
Physical state	: Solid
Molecular mass	: 183.12 g/mol
Colour	: Yellow powder.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 176 - 178 °C
Freezing point	: No data available
Boiling point	: 56.7 °C
Flash point	: 89 °C
Auto-ignition temperature	: > 350 °C
Decomposition temperature	: 290 °C

2,4-DINITRO ANILINE FOR SYNTHESIS Safety Data Sheet

Flammability (solid, gas)	: No data available
Vapour pressure	: 13 mbar at 20°C
Relative vapour density at 20 °C	: 6.31
Relative density	: No data available
Density Solubility	: 1.615 g/cm ³ : Water: Insoluble
Log Pow	: 5
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2.	Other information
No addit	ional information available
SECTIO	N 10: Stability and reactivity
10.1.	Reactivity
No addit	ional information available
10.2.	Chemical stability
Stable u	nder normal conditions.
10.3.	Possibility of hazardous reactions
No addit	ional information available
10.4.	Conditions to avoid
Air conta	act. Direct sunlight. Moisture.
10.5.	Incompatible materials
No addit	ional information available
10.6.	Hazardous decomposition products
No addi	ional information available

No additional information available

SECTION 11: Toxicological information		
11.1. Information on toxicological effe	ects	
Acute toxicity	: Oral: Fatal if swallowed. Dermal: Fatal in contact with skin. Inhalation: Fatal if inhaled.	
	. Not close fied	

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Safety Data Sheet

Reproductive toxicity STOT-single exposure	: Not classified : Not classified
STOT-repeated exposure Additional information	 May cause damage to organs through prolonged or repeated exposure. There are potential chronic health effects to consider
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Fatal if swallowed. Fatal in contact with skin.
SECTION 12: Ecological information	

12.1. Toxicity	
Ecology - water	: Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability		
2,4-DINITRO ANILINE FOR SYNTHESIS (97-02-9)		
Persistence and degradability	May cause long-term adverse effects in the environment.	

12.3.	Bioaccumulative potential	
2,4-DINITRO ANILINE FOR SYNTHESIS (97-02-9)		
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	: Hazardous waste due to toxicity.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / ADN	

14.1.	UN number	
UN-No.	(ADR)	: 1596

Safety Data Sheet

596
596
596
596

14.2. UN proper shipping name	
Proper Shipping Name (ADR)	: DINITROANILINES
Proper Shipping Name (IMDG)	: DINITROANILINES
Proper Shipping Name (IATA)	: Dinitroanilines
Proper Shipping Name (ADN)	: DINITROANILINES
Proper Shipping Name (RID)	: DINITROANILINES
Transport document description (ADR)	: UN 1596 DINITROANILINES, 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS
Transport document description (IMDG)	: UN 1596 DINITROANILINES, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
Transport document description (IATA)	: UN 1596 Dinitroanilines, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	: UN 1596 DINITROANILINES, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 1596 DINITROANILINES, 6.1, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) Danger labels (ADR)

: 6.1



: 6.1 : 6.1



IMDG

Transport hazard class(es) (IMDG) Danger labels (IMDG)



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Transport hazard class(es) (IATA) Hazard labels (IATA) : 6.1 : 6.1



ADN

Transport hazard class(es) (ADN)	:	6.1
Danger labels (ADN)	:	6.1

Safety Data Sheet



RID

Transport hazard class(es) (RID) Danger labels (RID)



: 6.1

: 6.1

14.4. Packing group	
Packing group (ADR)	: 11
Packing group (IMDG)	: 11
Packing group (IATA)	: 11
Packing group (ADN)	: 11
Packing group (RID)	: 11
14.5. Environmental haza	ards
Dangerous for the environme	ent : Yes

Other information	: No supplementary information available
Marine pollutant	: Yes
Dangerous for the environment	: Yes

14.6. Special precautions for user			
- Overland transport			
Classification code (ADR)	:	T2	
Limited quantities (ADR)	:	500g	
Excepted quantities (ADR)	:	E4	
Packing instructions (ADR)	:	P002, IBC08	
Special packing provisions (ADR)	:	B4	
Mixed packing provisions (ADR)	:	MP10	
Portable tank and bulk container instructions (ADR)	:	Т3	
Portable tank and bulk container special provisions (ADR)	:	TP33	
Tank code (ADR)	:	SGAH, L4BH	
Tank special provisions (ADR)	:	TU15, TE19	
Vehicle for tank carriage	:	AT	
Transport category (ADR)	:	2	
Special provisions for carriage - Packages (ADR)	:	V11	
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV13, CV28	
Special provisions for carriage - Operation (ADR)	:	S9, S19	
Hazard identification number (Kemler No.)	:	60	
Orange plates	:	60	
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2,4-DINITRO ANILINE FOR SYNTHESIS Safety Data Sheet

Salety Data Sheet	
Tunnel restriction code (ADR)	: D/E
EAC code	: 2X
- Transport by sea	
Packing instructions (IMDG)	: P002
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B21, B4
Tank instructions (IMDG)	: T3
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Stowage category (IMDG) Segregation (IMDG)	: SG15
Properties and observations (IMDG)	: Yellow crystals in pure form. Insoluble in water. May explode if involved in a fire.
	Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 153
- Air transport	
PCA Excepted quantities (IATA)	: E4
PCA Limited quantities (IATA)	: Y644
PCA limited quantity max net quantity (IATA)	: 1kg
PCA packing instructions (IATA)	: 669
PCA max net quantity (IATA)	: 25kg
CAO packing instructions (IATA)	: 676
CAO max net quantity (IATA)	: 100kg
ERG code (IATA)	: 6L
- Inland waterway transport	
Classification code (ADN)	: T2
Special provisions (ADN)	: 802
Limited quantities (ADN)	: 500 g
Excepted quantities (ADN)	: E4
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 2
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- Rail transport	
Classification code (RID)	: T2
Excepted quantities (RID)	: E4
Packing instructions (RID)	: P002, IBC08
Special packing provisions (RID)	: B4
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAH, L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W11
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE9
Hazard identification number (RID)	: 60

2,4-DINITRO ANILINE FOR SYNTHESIS Safety Data Sheet

	Annex II of MARPOL 73/78 and the IBC Code	
Not applicable		
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture		
15.1.1. EU-Regulations		
No REACH Annex XVII restrictions		
2,4-DINITRO ANILINE FOR SYNTHESIS is	s not on the REACH Candidate List	
2,4-DINITRO ANILINE FOR SYNTHESIS is	s not on the REACH Annex XIV List	
45.4.0 Notional requilations		
15.1.2. National regulations		
Germany		
Reference to AwSV	: Water hazard class (WGK) 3, severe hazard to water (Classification according to	
	AwSV; ID No. 704)	
12th Ordinance Implementing the Federal	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)	
Immission Control Act - 12.BImSchV		
Netherlands		
	: The substance is not listed	
SZW-lijst van mutagene stoffen	: The substance is not listed	
NIET-limitatieve lijst van voor de	: The substance is not listed	
voortplanting giftige stoffen – Borstvoeding		
NIET-limitatieve lijst van voor de	: The substance is not listed	
voortplanting giftige stoffen –		
Vruchtbaarheid	: The substance is not listed	
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling		
Denmark		
Class for fire hazard	: Class III-1	
Store unit	: 50 liter	
Classification remarks	: Flammable according to the Danish Ministry of Justice; Emergency management	
	guidelines for the storage of flammable liquids must be followed	
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product	
	Pregnant/breastfeeding women working with the product must not be in direct	
	contact with the product	

15.2. **Chemical safety assessment**

No additional information available

SECTION 16: Other information

Safety Data Sheet

Full text of R-, H- and EUH-statements:

,	
Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H300	Fatal if swallowed.
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed
R33	Danger of cumulative effects
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
N	Dangerous for the environment
T+	Very toxic

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product