LABORATORY REAGENTS CAS No: 100-16-3 MSDS & FINE CHEMICALS

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product form : Substance

CAS No : 100-16-3 Product code : 05020

Chemical structure NHNH₂

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

Details of the supplier of the safety data sheet

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Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

Classification of the substance or mixture

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

Flammable solids, H228

Category 1

H302 Acute toxicity (oral),

Category 4

H312

Acute toxicity (dermal), Category 4

Skin corrosion/irritation, H315

Category 2

Serious eye damage/eye H319

irritation, Category 2

Sensitisation — Skin,

H317

category 1

H335

Specific target organ toxicity — Single

exposure, Category 3, Respiratory tract irritation

www.lobachemie.com 09/04/2015 1/10

Safety Data Sheet

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11 Xn; R21/22

R5

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H228 - Flammable solid

H302+H312 - Harmful if swallowed or in contact with skin

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (CLP) : P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name : 4-NITROPHENYL HYDRAZINE AR

CAS No : 100-16-3

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

www.lobachemie.com 09/04/2015 2/10

Safety Data Sheet

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or

artificial respiration if necessary. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical

advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Rinse eyes with water as a

precaution. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : If you feel unwell, seek medical advice. Rinse mouth out with water.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause an allergic skin reaction.

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : Harmful in contact with skin. Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : Harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable solid.

5.3. Advice for firefighters

Firefighting instructions : DO NOT fight fire when fire reaches explosives. Evacuate area.

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. No naked lights. No smoking. Use special care to avoid

static electric charges.

6.1.1. For non-emergency personnel

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

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

6.4. Reference to other sections

No additional information available

www.lobachemie.com 09/04/2015 3/10

Safety Data Sheet

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

Precautions for safe handling : Keep away from sources of ignition - No smoking. No naked lights. No smoking.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash ... thoroughly after

handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep in fireproof place. Store in original container. Keep container tightly closed.

Store in a dry place.

Incompatible materials : Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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 : Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : Dark reddish brown.

Odour : odourless.

Odour threshold : No data available

pH : 6 - 8

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 156 °C

Freezing point : No data available

Boiling point : 100 °C

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

www.lobachemie.com 09/04/2015 4/10

Safety Data Sheet

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : 1 g/cm³

Solubility : Water: Slightly Soluble in water

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : Heating may cause an explosion.

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable solid.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Sparks. Open flame. Direct sunlight. Overheating.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Harmful in contact with skin.

Skin corrosion/irritation : Causes skin irritation.

pH: 6 - 8

Serious eye damage/irritation : Causes serious eye irritation.

pH: 6 - 8

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

www.lobachemie.com 09/04/2015 5/10

Safety Data Sheet

Reproductive toxicity : Not classified

Specific target organ toxicity (single

exposure)

: May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential adverse human health effects

and symptoms

: Harmful if swallowed. Harmful in contact with skin.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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

: Dispose of contents/container to ...

recommendations
Additional information

: Hazardous waste due to potential risk of explosion.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : 3376 UN-No. (IMDG) : 3376

www.lobachemie.com 09/04/2015 6/10

Safety Data Sheet

UN-No.(IATA) : 3376 UN-No.(ADN) : 3376 UN-No. (RID) : 3376

14.2. UN proper shipping name

Proper Shipping Name (ADR) : 4-NITROPHENYL-HYDRAZINE
Proper Shipping Name (IMDG) : 4-NITROPHENYLHYDRAZINE
Proper Shipping Name (IATA) : 4-NITROPHENYLHYDRAZINE
Proper Shipping Name (ADN) : 4-NITROPHENYLHYDRAZINE
Proper Shipping Name (RID) : 4-NITROPHENYLHYDRAZINE

Transport document description (ADR) : UN 3376 4-NITROPHENYL-HYDRAZINE, 4.1, I, (B)
Transport document description (IMDG) : UN 3376 4-NITROPHENYLHYDRAZINE, 4.1, I
Transport document description (IATA) : UN 3376 4-NITROPHENYLHYDRAZINE, 4.1
Transport document description (ADN) : UN 3376 4-NITROPHENYLHYDRAZINE, 4.1, I
Transport document description (RID) : UN 3376 4-NITROPHENYLHYDRAZINE, 4.1, I

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 4.1 Danger labels (ADR) : 4.1



IMDG

Transport hazard class(es) (IMDG) : 4.1 Danger labels (IMDG) : 4.1



IATA

Transport hazard class(es) (IATA) : 4.1

ADN

Transport hazard class(es) (ADN) : 4.1 Danger labels (ADN) : 4.1



RID

Transport hazard class(es) (RID) : 4.1 Danger labels (RID) : 4.1

www.lobachemie.com 09/04/2015 7/10

Safety Data Sheet



14.4. Packing group

Packing group (ADR) : I
Packing group (IMDG) : I

Packing group (IATA) : Not applicable

Packing group (ADN) : I
Packing group (RID) : I

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : D : 0 Limited quantities (ADR) Excepted quantities (ADR) : E0 : P406 Packing instructions (ADR) Special packing provisions (ADR) : PP26 Mixed packing provisions (ADR) : MP2 Transport category (ADR) : 1 Special provisions for carriage - Packages : V1

(ADR)

Special provisions for carriage - Operation : S14

(ADR)

Tunnel restriction code (ADR) : B EAC code : 1W

- Transport by sea

Special provision (IMDG) : 28

Limited quantities (IMDG) : 0

Excepted quantities (IMDG) : E0

Packing instructions (IMDG) : P406

Packing provisions (IMDG) : PP26, PP31

EmS-No. (Fire): F-BEmS-No. (Spillage): S-JStowage category (IMDG): E

Segregation (IMDG) : SG7, SG30

MFAG-No : 113

- Air transport

PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity : Forbidden

(IATA)

PCA packing instructions (IATA) : Forbidden
PCA max net quantity (IATA) : Forbidden
CAO packing instructions (IATA) : Forbidden
CAO max net quantity (IATA) : Forbidden
Special provision (IATA) : A2

www.lobachemie.com 09/04/2015 8/10

Safety Data Sheet

ERG code (IATA) : 3L

- Inland waterway transport

Classification code (ADN) : D Limited quantities (ADN) : 0 Excepted quantities (ADN) : E0 : PP Equipment required (ADN) Number of blue cones/lights (ADN) : 1

- Rail transport

Classification code (RID) : D Limited quantities (RID) : 0 : E0 Excepted quantities (RID) Packing instructions (RID) : P406 Special packing provisions (RID) : PP26 Mixed packing provisions (RID) : MP2 Transport category (RID) : 1 Special provisions for carriage - Packages : W1

(RID)

Colis express (express parcels) (RID) : CE10 Hazard identification number (RID) : 40

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

4-NITROPHENYL HYDRAZINE AR is not on the REACH Candidate List

4-NITROPHENYL HYDRAZINE AR is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Immission Control Act - 12.BImSchV

12th Ordinance Implementing the Federal : Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Denmark

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

www.lobachemie.com 09/04/2015 9/10

Safety Data Sheet

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

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

Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Sol. 1	Flammable solids, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H228	Flammable solid
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R11	Highly flammable
R21/22	Harmful in contact with skin and if swallowed
R5	Heating may cause an explosion
F	Highly flammable
Xn	Harmful

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

www.lobachemie.com 09/04/2015 10/10