

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

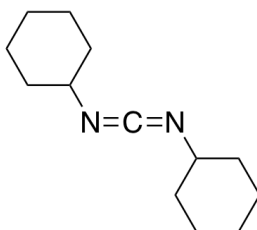
## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
SDS Reference Number: 3321B  
Issue date: 4/9/2014 Revision date: 1/6/2025 Supersedes version of: 12/15/2017 Version: 1.1

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

#### 1.1. Product identifier

Product form : Substance  
Trade name : N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS  
EC Index-No. : 615-019-00-5  
EC-No. : 208-704-1  
CAS-No. : 538-75-0  
Product code : 3321B  
Type of product : Organic compound  
Formula : C<sub>13</sub>H<sub>22</sub>N<sub>2</sub>  
Chemical structure :



Synonyms : Dicyclohexylmethanediimine, N,N'-Dicyclohexylmethanediimine

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

##### Relevant identified uses

Use of the substance/mixture : Industrial. For professional use only  
Use of the substance/mixture : Manufacture of substances  
Laboratory chemicals

#### 1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai  
INDIA  
T +91 22 6663 6663, F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com), [www.lobachemie.com](http://www.lobachemie.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (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), Category 4 H302  
Acute toxicity (dermal), Category 3 H311  
Serious eye damage/eye irritation, Category 1 H318  
Skin sensitisation, Category 1 H317  
Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Toxic in contact with skin. Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage.

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

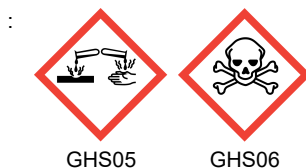
## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H302 - Harmful if swallowed.  
H311 - Toxic in contact with skin.  
H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.

Precautionary statements (CLP)

: P280 - Wear protective clothing, protective clothing, eye protection, face protection.  
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.  
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

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type

: Mono-constituent

| Name                        | Product identifier                                                   | %   |
|-----------------------------|----------------------------------------------------------------------|-----|
| N,N'DICYCLOHEXYLCARBODIMIDE | CAS-No.: 538-75-0<br>EC-No.: 208-704-1<br>EC Index-No.: 615-019-00-5 | 100 |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general

: Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

First-aid measures after skin contact

: Wash with plenty of water/.... Wash contaminated clothing before reuse. Get medical advice/attention. Wash skin with plenty of water. Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician immediately.

First-aid measures after ingestion

: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a doctor if you feel unwell.

First-aid measures for first aider

: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation

: May cause an allergic skin reaction.

Symptoms/effects after skin contact

: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contact with skin. May cause an allergic skin reaction.

Symptoms/effects after eye contact

: Causes serious eye damage. Serious damage to eyes.

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. 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 : 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

Fire hazard : No fire hazard.  
Explosion hazard : No direct explosion hazard.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.  
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Ventilate area. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.  
Methods for cleaning up : Mechanically recover the product. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                                   |                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use.                                                                                                                                                                                                                                                |
| Precautions for safe handling     | : Ensure good ventilation of the work station. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.                                                        |
| Hygiene measures                  | : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Always wash hands after handling the product. |

#### 7.2. Conditions for safe storage, including any incompatibilities

|                     |                                                                                     |
|---------------------|-------------------------------------------------------------------------------------|
| Technical measures  | : Keep in a cool, well-ventilated place away from heat.                             |
| Storage conditions  | : Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Packaging materials | : Store always product in container of same material as original container.         |

#### 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

##### Appropriate engineering controls

##### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### Personal protective equipment

##### Personal protective equipment:

Wear recommended personal protective equipment.

##### Personal protective equipment symbol(s):



##### Eye and face protection

##### Eye protection:

Chemical goggles or safety glasses

##### Skin protection

##### Skin and body protection:

Wear a mask

##### Hand protection:

Protective gloves

##### Respiratory protection

##### Respiratory protection:

Wear appropriate mask

##### Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                                                 |                                                 |
|-------------------------------------------------|-------------------------------------------------|
| Physical state                                  | : Solid                                         |
| Colour                                          | : White to yellowish.                           |
| Appearance                                      | : Wax-like solid. Crystalline solid.            |
| Molecular mass                                  | : 206.33 g/mol                                  |
| Odour                                           | : sweet odour.                                  |
| Odour threshold                                 | : Not available                                 |
| Melting point                                   | : 32 – 35 °C                                    |
| Freezing point                                  | : Not applicable                                |
| Boiling point                                   | : 122 – 124 °C                                  |
| Flammability                                    | : Non flammable.                                |
| Lower explosion limit                           | : Not applicable                                |
| Upper explosion limit                           | : Not applicable                                |
| Flash point                                     | : > 113 °C                                      |
| Auto-ignition temperature                       | : Not applicable                                |
| Decomposition temperature                       | : Not available                                 |
| pH                                              | : Not available                                 |
| pH solution                                     | : Not available                                 |
| Viscosity, kinematic                            | : Not applicable                                |
| Solubility                                      | : Water: Insoluble                              |
| Partition coefficient n-octanol/water (Log Kow) | : Not available                                 |
| Vapour pressure                                 | : 0.0192 hPa at 25 °C - OECD Test Guideline 104 |
| Vapour pressure at 50°C                         | : Not available                                 |
| Density                                         | : 1.325 g/cm <sup>3</sup>                       |
| Relative density                                | : Not available                                 |
| Relative vapour density at 20°C                 | : Not applicable                                |
| Particle size                                   | : Not available                                 |

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Sparks.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

|                                   |                                        |
|-----------------------------------|----------------------------------------|
| Acute toxicity (oral)             | : Harmful if swallowed.                |
| Acute toxicity (dermal)           | : Toxic in contact with skin.          |
| Acute toxicity (inhalation)       | : Not classified                       |
| Skin corrosion/irritation         | : Not classified                       |
| Serious eye damage/irritation     | : Causes serious eye damage.           |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. |
| Germ cell mutagenicity            | : Not classified                       |
| Carcinogenicity                   | : Not classified                       |
| Reproductive toxicity             | : Not classified                       |
| STOT-single exposure              | : Not classified                       |
| STOT-repeated exposure            | : Not classified                       |
| Aspiration hazard                 | : Not classified                       |

#### N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS (538-75-0)

|                      |                |
|----------------------|----------------|
| Viscosity, kinematic | Not applicable |
|----------------------|----------------|

#### 11.2. Information on other hazards

##### Other information

|                                                     |                                                     |
|-----------------------------------------------------|-----------------------------------------------------|
| Potential adverse human health effects and symptoms | : Harmful if swallowed, Toxic in contact with skin. |
|-----------------------------------------------------|-----------------------------------------------------|

### SECTION 12: Ecological information

#### 12.1. Toxicity

|                                                           |                                                                                                                         |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| Ecology - general                                         | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified                                                                                                        |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified                                                                                                        |

#### 12.2. Persistence and degradability

#### N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS (538-75-0)

|                               |                    |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

#### 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. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

No additional information available

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

|                                            |                                                                                                                                                                                                                        |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regional waste regulation                  | : Disposal must be done according to official regulations.                                                                                                                                                             |
| Waste treatment methods                    | : Dispose of contents/container in accordance with licensed collector's sorting instructions.                                                                                                                          |
| Sewage disposal recommendations            | : Disposal must be done according to official regulations.                                                                                                                                                             |
| 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. Disposal must be done according to official regulations. |
| Additional information                     | : Do not re-use empty containers.                                                                                                                                                                                      |
| Ecological information                     | : Hazardous waste due to toxicity.                                                                                                                                                                                     |

### SECTION 14: Transport information

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

#### 14.1. UN number or ID number

|               |           |
|---------------|-----------|
| UN-No. (ADR)  | : UN 2811 |
| UN-No. (IMDG) | : UN 2811 |
| UN-No. (IATA) | : UN 2811 |
| UN-No. (ADN)  | : UN 2811 |
| UN-No. (RID)  | : UN 2811 |

#### 14.2. UN proper shipping name

|                                            |                                                                                      |
|--------------------------------------------|--------------------------------------------------------------------------------------|
| Proper Shipping Name (ADR)                 | : TOXIC SOLID, ORGANIC, N.O.S.                                                       |
| Proper Shipping Name (IMDG)                | : TOXIC SOLID, ORGANIC, N.O.S.                                                       |
| Proper Shipping Name (IATA)                | : Toxic solid, organic, n.o.s.                                                       |
| Proper Shipping Name (ADN)                 | : TOXIC SOLID, ORGANIC, N.O.S.                                                       |
| Proper Shipping Name (RID)                 | : TOXIC SOLID, ORGANIC, N.O.S.                                                       |
| Transport document description (ADR) (ADR) | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (N,N'DICYCLOHEXYLCARBODIMIDE), 6.1, II, (D/E) |
| Transport document description (IMDG)      | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, II                                      |
| Transport document description (IATA)      | : UN 2811 Toxic solid, organic, n.o.s. (N,N'DICYCLOHEXYLCARBODIMIDE), 6.1, II        |
| Transport document description (ADN)       | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, II                                      |
| Transport document description (RID)       | : UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, II                                      |

#### 14.3. Transport hazard class(es)

##### ADR

|                                  |       |
|----------------------------------|-------|
| Transport hazard class(es) (ADR) | : 6.1 |
| Danger labels (ADR)              | : 6.1 |



##### IMDG

|                                   |       |
|-----------------------------------|-------|
| Transport hazard class(es) (IMDG) | : 6.1 |
| Danger labels (IMDG)              | : 6.1 |



##### IATA

|                                   |       |
|-----------------------------------|-------|
| Transport hazard class(es) (IATA) | : 6.1 |
| Danger labels (IATA)              | : 6.1 |

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



### ADN

Transport hazard class(es) (ADN) : 6.1

Danger labels (ADN) : 6.1



### RID

Transport hazard class(es) (RID) : 6.1

Danger labels (RID) : 6.1



## 14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

## 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-A

Other information : No supplementary information available

## 14.6. Special precautions for user

### Overland transport

Classification code (ADR) : T2

Special provisions (ADR) : 274, 614

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) : T3

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



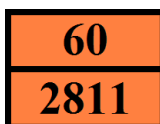
# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Orange plates

:



Tunnel restriction code (ADR)

: D/E

EAC code

: 2X

### Transport by sea

|                                    |                                                         |
|------------------------------------|---------------------------------------------------------|
| Special provisions (IMDG)          | : 274                                                   |
| Limited quantities (IMDG)          | : 500 g                                                 |
| Excepted quantities (IMDG)         | : E4                                                    |
| Packing instructions (IMDG)        | : P002                                                  |
| IBC packing instructions (IMDG)    | : IBC08                                                 |
| IBC special provisions (IMDG)      | : B21, B4                                               |
| Tank instructions (IMDG)           | : T3                                                    |
| Tank special provisions (IMDG)     | : TP33                                                  |
| Stowage category (IMDG)            | : B                                                     |
| Properties and observations (IMDG) | : Toxic if swallowed, by skin contact or by inhalation. |
| MFAG-No                            | : 154                                                   |

### 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  |
| Special provisions (IATA)                    | : A3, A5 |
| ERG code (IATA)                              | : 6L     |

### Inland waterway transport

|                                   |                 |
|-----------------------------------|-----------------|
| Classification code (ADN)         | : T2            |
| Special provisions (ADN)          | : 274, 614, 802 |
| Limited quantities (ADN)          | : 500 g         |
| Excepted quantities (ADN)         | : E4            |
| Equipment required (ADN)          | : PP, EP        |
| Number of blue cones/lights (ADN) | : 2             |

### Rail transport

|                                                                         |                    |
|-------------------------------------------------------------------------|--------------------|
| Classification code (RID)                                               | : T2               |
| Special provisions (RID)                                                | : 274, 614         |
| Limited quantities (RID)                                                | : 500g             |
| 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               |

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 15: Regulatory information

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

##### EU-Regulations

###### REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

###### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

###### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

###### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

###### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

###### Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

###### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

###### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

###### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

##### National regulations

###### France

| Occupational diseases |                                            |
|-----------------------|--------------------------------------------|
| Code                  | Description                                |
| RG 65                 | Eczematiform lesions of allergic mechanism |
| RG 66                 | Occupational rhinitis and asthma           |

###### Germany

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOC ordinance (ChemVOCFarbV)                   | :                                                                                                                                                                                                                                                                                                                                                                                                    |
| Water hazard class (WGK)                       | : WGK 3, Highly hazardous to water (Classification according to AwSV).                                                                                                                                                                                                                                                                                                                               |
| Chemicals Prohibition Ordinance (ChemVerbotsV) | : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10). |
| Hazardous Incident Ordinance (12. BImSchV)     | : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)                                                                                                                                                                                                                                                                                                                                   |

###### Netherlands

|                                                      |                               |
|------------------------------------------------------|-------------------------------|
| SZW-lijst van kankerverwekkende stoffen              | : The substance is not listed |
| SZW-lijst van mutagene stoffen                       | : The substance is not listed |
| SZW-lijst van reprotoxische stoffen – Borstvoeding   | : The substance is not listed |
| SZW-lijst van reprotoxische stoffen – Vruchtbaarheid | : The substance is not listed |
| SZW-lijst van reprotoxische stoffen – Ontwikkeling   | : The substance is not listed |

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Denmark

Danish National Regulations

: 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 chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: |                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------|
| ACGIH                       | American Conference of Government Industrial Hygienists                                         |
| ADN                         | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR                         | European Agreement concerning the International Carriage of Dangerous Goods by Road             |
| ATE                         | Acute Toxicity Estimate                                                                         |
| BCF                         | Bioconcentration factor                                                                         |
| BLV                         | Biological limit value                                                                          |
| BOD                         | Biochemical oxygen demand (BOD)                                                                 |
| CAS-No.                     | Chemical Abstract Service number                                                                |
| CLP                         | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| COD                         | Chemical oxygen demand (COD)                                                                    |
| CSA                         | Chemical safety assessment                                                                      |
| DMEL                        | Derived Minimal Effect level                                                                    |
| DNEL                        | Derived-No Effect Level                                                                         |
| EC-No.                      | European Community number                                                                       |
| EC50                        | Median effective concentration                                                                  |
| ED                          | Endocrine disruptor                                                                             |
| EN                          | European Standard                                                                               |
| EWC                         | European waste catalogue                                                                        |
| IARC                        | International Agency for Research on Cancer                                                     |
| IATA                        | International Air Transport Association                                                         |
| IMDG                        | International Maritime Dangerous Goods                                                          |
| LC50                        | Median lethal concentration                                                                     |
| LD50                        | Median lethal dose                                                                              |
| LOAEL                       | Lowest Observed Adverse Effect Level                                                            |
| Log Kow                     | Partition coefficient n-octanol/water (Log Kow)                                                 |
| Log Pow                     | Partition coefficient n-octanol/water (Log Pow)                                                 |
| MAK                         | maximum workplace concentration                                                                 |
| NOAEC                       | No-Observed Adverse Effect Concentration                                                        |
| NOAEL                       | No-Observed Adverse Effect Level                                                                |
| NOEC                        | No-Observed Effect Concentration                                                                |
| N.O.S.                      | Not Otherwise Specified                                                                         |

# N,N'DICYCLOHEXYLCARBODIMIDE FOR SYNTHESIS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Abbreviations and acronyms:

|      |                                                                              |
|------|------------------------------------------------------------------------------|
| OECD | Organisation for Economic Co-operation and Development                       |
| OEL  | Occupational Exposure Limit                                                  |
| OSHA | Occupational Safety & Health Administration                                  |
| PBT  | Persistent Bioaccumulative Toxic                                             |
| PNEC | Predicted No-Effect Concentration                                            |
| PPE  | Personal protection equipment                                                |
| RID  | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS  | Safety Data Sheet                                                            |
| STP  | Sewage treatment plant                                                       |
| TF   | Technical function                                                           |
| ThOD | Theoretical oxygen demand (ThOD)                                             |
| TLM  | Median Tolerance Limit                                                       |
| TWA  | Time Weighted Average                                                        |
| VOC  | Volatile Organic Compounds                                                   |
| vPvB | Very Persistent and Very Bioaccumulative                                     |
| UFI  | Unique Formula Identifier                                                    |

### Full text of H- and EUH-statements:

|                       |                                               |
|-----------------------|-----------------------------------------------|
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal), Category 3           |
| Acute Tox. 4 (Oral)   | Acute toxicity (oral), Category 4             |
| Eye Dam. 1            | Serious eye damage/eye irritation, Category 1 |
| Skin Sens. 1          | Skin sensitisation, Category 1                |
| H302                  | Harmful if swallowed.                         |
| H311                  | Toxic in contact with skin.                   |
| H317                  | May cause an allergic skin reaction.          |
| H318                  | Causes serious eye damage.                    |

Safety Data Sheet (SDS), EU

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.