

Safety Data Sheet

COMMISSION REGULATION (EU) NO 2015/830 OF 1st June 2015

Amending Annex II of Regulation EU No 453/2010

Revision No-05

Printing Date 25/08/2020

Product Name – Diethylamine Hydrochloride

Revision Date- 24/08/2020

1. Identification Of the Substance

1.1 Product Identifier

- **Product Name:** Diethylamine Hydrochloride (Diethylammonium Chloride)
- **CAS No:** 660-68-4
- **EC No:** 211-541-9

1.2 Relevant Identified Uses of the substance or mixture and uses advised against: As an intermediate

1.3 Details of the Supplier of the Safety Data Sheet

– **Manufacturer/supplier:**

Alkyl Amines Chemicals Ltd
401-407, Nirman Vyapar Kendra, Plot No-10
Sect-17, Vashi, Navi Mumbai
India – 400703

Emergency Contact no- +91 2117 235175 / 235222 **Mobile no:** +919881973507 / +919423002721

Emergency Contact No for US only- +1 703 527 3887 / 800 424 9300

e-mail Address of the competent Person responsible for Safety Data Sheet:

rsattigeri@alkylamines.com

Information Dept: R&D

1.4 Emergency Telephone Numbers : As mentioned above

2. Hazard Identification

2.1 Classification of Substance or Mixture

– **Classification According to EC regulation 1272/2008**



GHS07

Skin Irrit. 2: H315 Causes skin irritation.

Eye Irrit. 2 :H319 Causes serious eye irritation

Specific target organ toxicity - single exposure (Category 3), Respiratory system:

H335 :May Cause respiratory irritation

2.2 Label Elements

- Labelling According to Regulation EC 1272/2008

The substance is classified according to CLP Regulation

Hazard Pictogram



GHS07

Signal Word- Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May Cause respiratory irritation

Precautionary statements

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Prevention:**P261** Avoid breathing dust.**Response:****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.**P304+P340** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**P330** Rinse mouth.**P332+P313** If skin irritation occurs: Get medical advice/attention.**P337+P313** If eye irritation persists: Get medical advice/attention**Storage:****P403+P233** Store in a well-ventilated place. Keep container tightly closed.**Disposal:****P501** Dispose of contents in accordance with local/ regional/national/international regulation**-2.3 Other hazards**

Risk of dust explosion.

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

3. Composition/Information on Ingredients

Description	CAS No	EC No	Content (% w/w)
Diethylamine Hydrochloride	660-68-4	211-541-9	>99.5

Molecular Formula – C₄H₁₁N.HCl**Molecular Wt-** 109.60 g/mole**4. First- Aid Measures****--4.1 Description of first aid measures****- General information:**

Immediately remove any clothing contaminated by the product.

-After inhalation:

Move the person to fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.

-After skin contact:

Wash with water and soap. If skin irritation continues, consult a doctor.

- After eye contact:

Rinse opened eye for several minutes under running water. Then consult doctor.

- After swallowing:

Do not give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.**- 4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5. Fire Fighting Measures**-5.1 Extinguishing media****-Suitable extinguishing agents** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide**-For safety reasons unsuitable extinguishing agents** none

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-5.2 Special hazards arising from the substance or mixtureNitrogen oxides (NO_x)

Hydrogen chloride (HCl)

Carbon monoxide (CO) and Carbon dioxide (CO₂)**-5.3 Advice for firefighters****- Protective equipment:** Wear self-contained breathing apparatus.**-Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. Accidental release Measures**- 6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Avoid causing dust.

Do not breathe dust.

Avoid contact with skin and eyes.

- 6.2 Environmental precautions: Do not allow to enter drainage system, surface or ground water.**- 6.3 Methods and material for containment and cleaning up:**

Collect mechanically.

Ensure adequate ventilation.

Dispose of the material collected according to regulations.

- 6.4 Reference to other sections

See Section 8 for information on personal protection equipment.

7. Handling and Storage**- 7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Do not breathe dust.

Avoid contact with skin and eyes.

Make sure that all applicable workplace limits are observed.

- Information about protection against explosions and fires:

Risk of dust explosion if enriched with fine dust in presence of air.

Keep ignition sources away - Do not smoke.

- 7.2 Conditions for safe storage, including any incompatibilities**- Storage****- Requirements to be met by storerooms and containers:**

Observe all local and national regulations for storage of water polluting products.

- Information about storage in one common storage facility: Not required.**- Further information about storage conditions:**

Store under shade at ambient temperature (<45°C) & dry conditions in well-sealed containers

This product is hygroscopic.

Protect from humidity and keep away from water.

-7.3 Specific end use(s) No further relevant information available.**8. Exposure Control/Personal Protection****- Additional information about design of technical systems:** No further data available**- 8.1 Control parameters****- Components with critical values that require monitoring at the workplace:** Not required.**- Additional information:** The lists that were valid during the compilation were used as basis**- 8.2 Exposure controls****- Personal protective equipment****- General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

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Do not eat, drink or smoke while working.

Instantly remove any contaminated garments.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Wash hands during breaks and at the end of the work.

- Breathing equipment:

Use breathing protection in case of dust formation.

Filter P2.

- Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- Material of gloves

Nitrile rubber - NBR

Recommended thickness of the material: ≥ 0.11 mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- Penetration time of glove material

Penetration time: ≥ 8 hours

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

-Eye protection: Tightly sealed safety glasses

- Body protection: Protective work clothing

9. Physical and Chemical Properties

-9.1 Information on basic Physical and Chemical Properties

General Information-

Appearance/Physical state /colour	White crystalline solids
Explosive limit Upper lower	No data available
Odour	No specific odour
Vapour pressure	No data available
Odour Threshold	No data available
Vapour density	No data available
PH (10% in water)	No data available
Bulk Density	No data available
Melting point/freezing point	227-230 °C
Solubility in water	Freely soluble
Initial Boiling Point/Boiling Range	Not applicable
Flash Point	Not applicable
Evaporation Rate	No data available
Flammability (solid, gas)	Not Applicable
Partition Coefficient : n-Octanol Water	No data available
Auto ignition Temperature	Not applicable
Decomposition temperature	No data available
Viscosity- dynamic Kinematic	Not applicable
Danger of Explosion	Not applicable

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-9.2 Other Information- Not applicable

10. Stability and Reactivity

-10.1 Reactivity

-10.2 Chemical stability

-Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

-10.3 Possibility of hazardous reactions

Formation of nitrosamines possible.

Possibility of formation of nitrosamines with nitrites or other nitrosating agents

Risk of dust explosion if enriched with fine dust in presence of air.

-10.4 Conditions to avoid No further relevant information available.

-10.5 Incompatible materials:

Strong oxidizing agents

- 10.6 Hazardous decomposition products:

Nitrogen oxides (NO_x)

Hydrogen chloride (HCl)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

11. Toxicological Information

-11.1 Information on Toxicological effects

Acute Toxicity –

LD50/LC50 value that are relevant for classification

LD50 Oral (rat)	9900 mg/kg
LD50 Intraperitoneal (mouse)	960 mg/kg

-Primary irritant effect

-on the skin: irritating to skin

-on the eyes: irritant effect

-Sensitization: No sensitizing effects known

-specific target organ toxicity single exposure: The substance may cause respiratory irritation.

-Additional toxicological information – further hazardous properties can not be excluded.

12. Ecological Information

-12.1 Toxicity

-Aquatic toxicity: No further relevant information available.

-12.2 Persistence and degradability No further relevant information available.

-12.3 Bioaccumulative potential

No relevant data available

-12.4 Mobility in soil No further relevant information available.

-Additional ecological information:

-General notes: Water hazard class 1 (Assessment by list): slightly hazardous for water

- 12.5 Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

- 12.6 Other adverse effects No further relevant information available

13. Disposal Consideration

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-13.1 Waste treatment methods**-Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Waste disposal key number:** According to local/national regulations.

-European waste catalogue:

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- Uncleaned packagings:

-Recommendation: Disposal must be made according to official regulations. Decontamination of the bag/container shall be done by washing with water. It is strongly recommended to disfigure the container/drum before disposal.

14. Transport Information**-14.1 UN-Number**

-ADR, IMDG, IATA Void

-14.2 UN proper shipping name

-ADR, IMDG, IATA Void

-14.3 Transport hazard class(es)

-ADR, IMDG, IATA

-Class Void

-14.4 Packing group

-ADR, IMDG, IATA Void

-14.6 Special precautions for user Not applicable.

-14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

-Transport/Additional information: Not dangerous according to the above specifications.

-UN "Model Regulation": -

15. Regulatory Information

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

- National regulations

- Information about limitation of use: Employment restrictions concerning young persons must be observed.

- Decree to be applied in case of technical fault: Directive 96/82/EC does not apply.

- Water hazard class:

Water hazard class 1 (Assessment by list): slightly hazardous for water

ID-Number: 457

- Chemical Safety Assessment: A chemical Safety Assessment has not been carried out

16. Other Information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship

Dept Issuing MSDS- R&D

Only Representative : Global Product Compliance (Europe)AB, Lund , Sweden

e-mail: sk@reach-onlyrep.eu info@gpcregulatory.com

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the

International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement



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concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Ref-

- 1) Regulation (EC) No 1272/2008 of the European Parliament and of the Council
- 2) Guidance on the compilation Safety Data Sheet published by ECHA Ver. 2.1 Feb 2014
- 3) Chem-watch Gold MSDS for Dimethylammonium chloride
- 4) Toxnet HSDB
- 5) European Chemicals Agency, <http://echa.europa.eu/>
- 6) Registry of Toxic effects of Chemical Substances (RTECS)