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1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: QUINOLINE FOR SYNTHESIS

Product code: 17657

Identification of the product : Quinoline

CAS No: 91-22-5

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

Use: Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification: MOLYCHEM

Office: 78/80 Babu Genu Road, Souri Bldg., 2nd Floor, Mumbai – 400 002 (INDIA) Tel:

+91 22 4066 8111, 2205 7772 . Fax: +91 22 2203 4442.

Email: info@molychem.net

Works: Plot No. B/9, Badlapur M.I.D.C., OPP. Shobhavat Textile Co.,

Kulgaon, Badlapur (E), Dist.-Thane-421 503.

1.4. Emergency telephone number

Emergency number: +91 22 4066 8111 (10:00am - 6:00 pm).

2. Hazards identification -DSD

2.1. Classification of the substance or mixture

Classification EC 67/548 or EC 1999/45

Classification: Xn; R21/22

Xi; R36/38 N: R51-53

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards: Specific Target Organ Toxicity - Single exposure - Category 2 -

Warning (CLP: STOT SE 2) H371

Eye irritation - Category 2A - Warning (CLP: Eye Irrit. 2) H319

Skin irritation - Category 2 - Warning (CLP: Skin Corr. 2) H315

Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302

Acute toxicity, dermal - Category 4 - Warning (CLP : Acute Tox. 4) H312

Environmental hazards: Hazardous to the aquatic environment - Chronic hazard -

Category 2 (CLP: Aquatic Chronic 2) H411

2.2. Label elements

Labelling EC 67/548 or EC 1999/45

Symbol(s): T: Toxic

N : Dangerous for the environment

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R Phrase(s): R21/22: Harmful in contact with skin and if swallowed.

R36/38: Irritating to eyes and skin.

R45: May cause cancer.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R68: Possible risks of irreversible effects.

S Phrase(s): S24/25: Avoid contact with skin and eyes.

S36/37: Wear suitable protective clothing gloves.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

S53: Avoid exposure - obtain special instructions before use.

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

Labelling Regulation EC 1272/2008 (CLP)

Hazard pictograms







Signal words: Warning

Hazard statements: H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H371: May cause damage to organs.

H411: Toxic to aquatic life with long lasting effects.

Precautionary statements

• **Prevention**: P280: Wear protective gloves, protective clothing, eye protection, face protection.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment.

P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

• **Response**: P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel unwell.

P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor.

P332+P313: If skin irritation occurs: Get medical advice.

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P391: Collect spillage.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

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

P363: Wash contaminated clothing before reuse.

• Storage: P405: Store locked up.

• **Disposal considerations**: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Other hazards: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

3. Composition/information on ingredients

Substance / Preparation : Quinoline

CAS No:91-22-5

Substance.

Contains no other components or impurities which will influence the classification of the product.

4. First aid measures

4.1. Description of first aid measures

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. **Skin contact**: If skin irritation occurs: Get medical advice. Wash contaminated clothing before reuse. Wash with plenty of soap and water. Specific treatment (see on this label). Immediately call a POISON CENTER or doctor.

Eye contact: Get medical advice. If eye irritation persists: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. **Ingestion**: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

Symptoms relating to use: Repeated exposure to this material can result in absorption through skin causing significant health hazard. Swallowing a small quantity of this material will result in serious health hazard. Causes serious eye irritation. Causes skin irritation. May cause damage to organs.

4.3. Indication of any immediate medical attention and special treatment needed General information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

5. Fire-fighting measures

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5.1. Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

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

Surrounding fires: Use water spray or fog for cooling exposed containers.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

Protection against fire: Do not enter fire area without proper protective equipment, including respiratory protection.

Special procedures: Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For emergency responders: Equip cleanup crew with proper protection.

Ventilate area. Avoid breathing dust, fume, gas, mist, vapours, spray.

For non-emergency personnel: Evacuate unnecessary personnel.

6.2. Environmental precautions

Environmental precautions: Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Clean up methods: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Store away from other materials. Collect spillage.

6.4. Reference to other sections

See section 8. Exposure controls/personal protection

7. Handling and storage

7.1. Precautions for safe handling

Personal protection: Wash thoroughly after handling. Do not breathe dust, fume, gas, mist, vapours, spray. Do not eat, drink or smoke when using this product.

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

Technical protective measures: Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

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7.3. Specific end use(s)

Specific end use(s): None.

8. Exposure controls/personal protection

8.1. Exposure controls

Personal protection: Avoid all unnecessary exposure.

- **Respiratory protection**: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
- Hand protection : Wear protective gloves.
- Skin protection : Wear suitable protective clothing.
- Eye protection : Chemical goggles or safety glasses.
- Others: When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits: No data available.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state at 20 °C : Liquid. Odour threshold : No data available.

pH value : No data available. Melting point [°C] : -17 - -13 °C Decomposition point [°C] : N/A Critical temperature [°C] : N/A

Auto-ignition temperature [°C]: 1 mm Hg @59.70C

Flammability (solid, gas): N/A

Flash point $[^{\circ}C]$: 101 $^{\circ}C$

Boiling point [°C] : 113 - 114 °C **Initial boiling point** [°C] : N/A **Final boiling point** [°C] : N/A

Evaporation rate: N/A

Vapour pressure [20°C]: 0.09 hPa at 20 °C

Vapour pressure mm/Hg: N/A

Vapour density: 4,46 Density [g/cm3]: 1,093

Relative density, gas (air=1) : N/A Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : Slightly soluble in

Solubility in water : N/A

Log Pow octanol / water at 20°C: No data available.

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Solubility: 7,3

Viscosity at 40°C [mm2/s] : N/A

9.2. Other information Explosive properties : N/A

Explosion limits - upper [%]: N/A Explosion limits - lower [%]: N/A Oxidising properties: No data available.

10. Stability and reactivity

10.1. Reactivity

Reactivity: Not established. **10.2. Chemical stability**

Chemical stability: Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions Hazardous reactions : Not established.

10.4. Conditions to avoid

Conditions to avoid: Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid: Strong acids. Strong bases.

10.6. Hazardous decomposition products

Hazardous decomposition products: Fumes. Carbon monoxide. Carbon dioxide.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity

- **Inhalation**: Based on available data, the classification criteria are not met.
- **Dermal**: Harmful in contact with skin.
- **Ingestion**: Harmful if swallowed.

Corrosion: Based on available data, the classification criteria are not met.

Irritation: Causes serious eye irritation. Causes skin irritation.

Sensitization: Based on available data, the classification criteria are not met.

Mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Toxic for reproduction: Based on available data, the classification criteria are not met.

STOT-single exposure: Causes damage to organ.

STOT-repeated exposure: Based on available data, the classification criteria are not met

Aspiration hazard: Based on available data, the classification criteria are not met.

12. Ecological information

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12.1. Toxicity

Toxicity information: Toxic to aquatic life with long lasting effects.

12.2. Persistence - degradability

Persistence - degradability: May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Bioaccumulative potential: Not established.

12.4. Mobility in soil

Mobility in soil: Not established.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

12.6. Other adverse effects

Environmental precautions: Avoid release to the environment.

13. Disposal considerations

13.1. Waste treatment methods

General: Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

14. Transport information

14.1. Land transport (ADR-RID)

Proper shipping name: QUINOLINE

UN N°: 2656 H.I. nr: 60 ADR - Class: 6.1

Labelling - Transport: 6.1 : Toxic substances.

ADR - Classification code : T1

ADR - Group : III

ADR - Packing instructions: P001 R001 LP001

ADR - Limited Quantity: 5 L

ADR - Tunnel code : E : Passage forbidden through tunnels of category E.

14.2. Sea transport (IMDG) [English only]

Proper shipping name: QUINOLINE

UN N°: 2656

IMO-IMDG - Class or division: 6.1: Toxic substances.

IMO-IMDG - Packing group: III

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IMO- IMDG - Packing instructions: P001 LP01

IMO-IMDG - Limited quantities : 5 L **IMO-IMDG - Marine pollution** : Yes

EMS-Nr : F-A S-A

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name: QUINOLINE

UN N°: 2656

IATA - Class or division: 6.1: Toxic substances.

IATA - Packing group: III

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing: 655

instruction

- Passenger and Cargo - Maximum : 60 L

Ouantity/Packing

IATA - Cargo only: ALLOWED

- Cargo only - Packing instruction : 663- Cargo only - Maximum Quantity/ : 220 L

Packing

IATA - Limited Quantites: 2 L

ERG-Nr: 6L

15. Regulatory information

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

Safety, health and environmental: Ensure all national/local regulations are observed. **regulations/legislation specific for the substance or mixture**

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV: The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment: It has not been carried out.

16. Other information

Abbreviations and acronyms: PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives

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67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 **Further information**: None.

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