

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

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

· **1.1 Product identifier**

- **Trade name:** NMP
- **CAS Number:** 872-50-4
- **EC number:**
212-828-1
- **Index number:**
606-021-00-7

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

- **Application of the substance / the mixture**
Used in polymers and coating products.
Used in formulation of mixtures.
manufacturing of the substance.
Used in scientific research and development.

· **1.3 Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**
Kairav Chemofarbe Industries Ltd
502 Filix, LBS Marg,
Opposite Asian Paints,
Bhandup (West),
Mumbai-400078

· **Further information obtainable from:**

Tel: - +91-22-25968361/ 62 /25962453/25962457

· **1.4 Emergency telephone number:**

Contact details of European importer

Emergency telephone number:

Telephone number of EU importer:

Opening hours:

Other Comments (e.g., language(s) of the phone service): English

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



health hazard

Repr. 1B H360D May damage the unborn child.

(Contd. on page 2)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 1)



Skin Irrit. 2 H315 Causes skin irritation.
 Eye Irrit. 2 H319 Causes serious eye irritation.
 STOT SE 3 H335 May cause respiratory irritation.

- **2.2 Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger

- **Hazard statements**

H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H360D May damage the unborn child.
 H335 May cause respiratory irritation.

- **Precautionary statements**

P201 Obtain special instructions before use.
 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.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** The substance is not PBT
- **vPvB:** The substance is not vPvB

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**

- **CAS No. Description**

872-50-4 NMP

(Contd. on page 3)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 2)

- **Identification number(s)**
- **EC number:** 212-828-1
- **Index number:** 606-021-00-7
- **Additional information:**
Molecular Formula: C5H9NO
Molecular Weight: 99.13 g/mol
SMILES: CN1CCCC1=O

· **SVHC**

NMP

SECTION 4: First aid measures· **4.1 Description of first aid measures**· **General information:**

- Do not leave affected persons unattended.*
- Move out of dangerous area.*
- Seek medical assistance if case of discomfort.*
- Show the safety data sheet to the doctor in attendance.*

· **After inhalation:**

- Encourage patient to blow nose to ensure clear passage of breathing.*
- Inhalation may cause discomfort. Move patient to fresh air. Monitor for respiratory distress.*
- Keep person warm and at rest.*
- Maintain an open airway.*
- In case of unconsciousness place patient stably in the side position for transportation.*

· **After skin contact:**

- Immediately wash with soap and water for at least 15 minutes, immediately remove contaminated clothing and shoes, seek medical attention, if redness or irritation occurs.*

· **After eye contact:**

- Remove contact lenses if present and easy to do.*
- Eyelids should be held away from the eyeball to ensure thorough rinsing.*
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

· **After swallowing:**

- Clean mouth by gargling with water.*
- Do not induce vomiting*
- If vomiting occurs, lean patient forward or place on the left side (head-down position, if possible) to maintain an open airway and prevent aspiration.*

· **Information for doctor:** Treat symptomatically.· **4.2 Most important symptoms and effects, both acute and delayed**

- No further relevant information available.*

(Contd. on page 4)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 3)

- **4.3 Indication of any immediate medical attention and special treatment needed**
 No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
 powder or water spray.
 Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** High volume water jet
- **5.2 Special hazards arising from the substance or mixture**
 toxic gases/vapours are produced in fire.
 Smoke, carbon monoxide, carbon dioxide, aldehydes, and other products of incomplete combustion.
 Under combustion conditions, oxides of nitrogen are formed.
- **5.3 Advice for firefighters**
 Use water delivered as a fine spray to control fire and cool adjacent area.
 If safe to do so, remove containers from path of fire.
 Use standard fire fighting procedures.
- **Protective equipment:**
 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
 Avoid accumulation of vapours.
 Do not eat, drink or smoke when using this product.
 Use personal protective equipment.
 Keep unprotected persons away.
- **6.2 Environmental precautions:**
 Dilute with plenty of water.
 Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
 Ensure adequate ventilation.
 For large amounts: Pump off product.
 For small spills/residues: Pick up with suitable absorbent material (e.g., sand, sawdust, general-purpose binder).
 Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.
 Collect waste in suitable containers, which can be labeled and sealed.
 Incinerate or take to a special waste disposal site in accordance with local authority regulations.

(Contd. on page 5)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 4)

· 6.4 Reference to other sections*See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.***SECTION 7: Handling and storage****· 7.1 Precautions for safe handling***Avoid breathing dust/fume/gas/mist/vapours.**Handle in accordance with good industrial hygiene and safety practice.**When handling do not eat, drink, or smoke.**Avoid contact with eyes and skin.***· Information about fire - and explosion protection:***Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.**Keep away from sources of ignition - No smoking.***· 7.2 Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and receptacles:***Containers have to be labelled clearly and permanently.**Store in the original container as much as possible.**Keep container closed when not in use. Keep away from heat.**Store in cool and dry place.***· Information about storage in one common storage facility:***keep away from food materials**Keep away from heat and sunlight.**Do not store near alkalis.**Do not store near acids.***· Further information about storage conditions:***Check regularly for leaks.**To maintain product quality, do not store in heat or direct sunlight.**Keep container tightly sealed.***· 7.3 Specific end use(s)***Used in polymers and coating products.**Used in formulation of mixtures.**manufacturing of the substance.**Used in scientific research and development.*IN
(Contd. on page 6)

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 5)

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

- **Ingredients with limit values that require monitoring at the workplace:**

NMP

| | |
|------------|---|
| IOELV (EU) | Short-term value: 80 mg/m ³ , 20 ppm Long-term value: 40 mg/m ³ , 10 ppm Skin |
|------------|---|

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Avoid contact with eyes, skin and clothing.
 Do not eat, drink, smoke or sniff while working.
 Good personal hygiene practices should be followed.
 Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
- **Respiratory protection:**
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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**

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**

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

(Contd. on page 7)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 6)

- **Eye protection:**
Face shield and chemical safety goggles.



Tightly sealed goggles

- **Body protection:** Wear appropriate protective clothing to minimize contact with skin.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

| | |
|---|---|
| · Appearance: | Clear liquid |
| · Form: | Liquid |
| · Colour: | Colourless |
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |
| · pH-value: | Not determined. |
| · Change in condition | |
| · Melting point/freezing point: | -24.2 °C (OECD TG 102) |
| · Initial boiling point and boiling range: | 204.3 °C (OECD TG 104) |
| · Flash point: | 93 °C (ISO 2719) |
| · Flammability (solid, gas): | the study does not need to be conducted because the substance is a liquid |
| · Auto-ignition temperature: | 251 °C (DIN EN 14522) |
| · Explosive properties: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| · Upper: | |
| · Oxidising properties | No oxidising properties |
| · Vapour pressure at 20 °C: | 0.32 hPa (OECD TG 104) |
| · Density at 25 °C: | 1.03 g/cm ³ (OECD TG 109) |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Very soluble |
| · Partition coefficient: n-octanol/water at 25 °C: | -0.46 log POW (OECD TG 107) |

(Contd. on page 8)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 7)

- | | |
|---|--|
| · Viscosity: Dynamic at 20 °C: | 1.661 mPas |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable at ambient temperature and under normal conditions of use.
- **Thermal decomposition / conditions to be avoided:**
Material is normally stable at moderately elevated temperatures and pressures.
Decomposition Temperature > 300 °C, > 572 °F
- **10.3 Possibility of hazardous reactions**
Exothermic reaction.
Reacts with strong acids and alkalis.
- **10.4 Conditions to avoid** Avoid all sources of ignition: heat, sparks, open flame.
- **10.5 Incompatible materials:**
Hygroscopic - avoid presence of moisture. Strong acids. Strong bases. Reducing agents.
Strong oxidizing agents.
- **10.6 Hazardous decomposition products:**
toxic gases/vapours are produced in fire.
Smoke, carbon monoxide, carbon dioxide, aldehydes, and other products of incomplete combustion.
Under combustion conditions, oxides of nitrogen are formed.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data; the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

| | | |
|------------|-------------------|---|
| Oral | LD50 | 4150 mg/Kg bw (rat (Sprague-Dawley) male/female) (OECD TG 401) |
| Dermal | LD50 | > 5000 mg/kg bw (rat (Sprague-Dawley) male/female) (OECD TG 402) |
| Inhalative | 4h-LC50 (aerosol) | > 5.1 mg/L air (rat (Wistar)) (OECD TG 403) |

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
It can cause dermatitis with blistering with prolonged or repeated contact.

(Contd. on page 9)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 8)

- **Serious eye damage/irritation**
Causes serious eye irritation.
Primary irritation index: 41
Max. score: 110
Moderate ocular effects observed according to the Draize score system.
- **Respiratory or skin sensitisation**
Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** *Based on available data; the classification criteria are not met.*
- **Carcinogenicity** *Based on available data, the classification criteria are not met.*
- **Reproductive toxicity**
May damage the unborn child.
the NOAEL for reproductive performance/fertility was 350 mg/kg bw/day.
Developmental toxicity was evidenced by increased pup mortality and reduced body weight gain, including corresponding effects in the investigated organs, in pups treated at 500/350 mg/kg bw/day.
- **STOT-single exposure**
May cause respiratory irritation.
Accelerated, irregular breathing, slightly reddish nasal secretion and reduced pain sensitivity during exposure.
Reddish-brown foci were noted in all lobes of the lungs.
- **STOT-repeated exposure** *Based on available data; the classification criteria are not met.*
- **Aspiration hazard** *No further relevant information available.*

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

| | |
|----------|---|
| 21d-NOEC | 12.5 mg/L (<i>Daphnia magna</i>) (OECD TG 211) |
| 72h-EC50 | 600.5 mg/L (<i>Desmodesmus subspicatus</i>) (German DIN 38412 Part 9) |
| 96h-LC50 | > 500 mg/L (<i>Oncorhynchus mykiss</i>) |

- **12.2 Persistence and degradability** *Readily biodegradable*
- **12.3 Bioaccumulative potential** *No potential for bioaccumulation.*
- **12.4 Mobility in soil** *Adsorption to the solid soil phase is not expected.*
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *The substance is not PBT.*
- **vPvB:** *The substance is not vPvB.*

(Contd. on page 10)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 9)

- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**

- **Recommendation**

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

Incinerate in suitable incineration plant, observing local authority regulations.

All disposal practices must be in accordance with local, regional, national and international regulations.

Do not dispose in landfill.

Empty container retains product residue and can be hazardous.

- **Uncleaned packaging:**

- **Recommendation:**

Dispose of packaging or containers in accordance with local, regional, national, and international regulations.

- **Recommended cleansing agents:** Water, if necessary, together with cleansing agents.

SECTION 14: Transport information

- **14.1 UN-Number**

- **ADR, IMDG, IATA**

Not regulated

- **14.2 UN proper shipping name**

- **ADR, IMDG, IATA**

Not regulated

- **14.3 Transport hazard class(es)**

- **ADR, ADN, IMDG, IATA**

- **Class**

Not regulated

- **14.4 Packing group**

- **ADR, IMDG, IATA**

Not regulated

- **14.5 Environmental hazards:**

Not applicable.

- **Marine pollutant:**

No

- **14.6 Special precautions for user**

Not applicable.

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

(Contd. on page 11)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 10)

| | |
|---------------------------------|---------------|
| · UN "Model Regulation": | Not regulated |
|---------------------------------|---------------|

SECTION 15: Regulatory information

- **15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger
- **Hazard statements**
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H360D May damage the unborn child.
 H335 May cause respiratory irritation.
- **Precautionary statements**
 P201 Obtain special instructions before use.
 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.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **National regulations:**
- **Other regulations, limitations and prohibitive regulations**
 AICIS: Listed
 China-IECSC: Listed
 Danish-EPA: Listed
 EU-EINECS: Listed
 Canada-DSL: Listed
 US-EPA TSCA: Listed
 Japan-CSCL: Listed

(Contd. on page 12)

IN

Safety data sheet
COMMISSION REGULATION (EU) 2020/878 of 18 June
2020 amending Annex II to Regulation (EC) No
1907/2006

Printing date 25.02.2022

Version number 1

Revision: 25.02.2022

Trade name: NMP

(Contd. of page 11)

Korea KE-Number: KE-25324
 New Zealand-NZIoC: Listed
 Philippines-PICCS: Listed
 Vietnam-NCI: Listed
 Turkey-CSI HPV: Listed

· **Substances of very high concern (SVHC) according to REACH, Article 57**

NMP

· **15.2 Chemical safety assessment:**

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department.

· **Contact:**

Tel: - +91-22-25968361/ 62 /25962453/25962457

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised 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

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Repr. 1B: Reproductive toxicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· **Sources**

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

- Data from ECHA Dossier for CAS 872-50-4:

<https://echa.europa.eu/substance-information/-/substanceinfo/100.011.662>

- Data from Toxplanet:

<https://chemical-search.toxplanet.com//product-search/chem-id/ei-fts-search/c4288705-523b-4a3c-b454-5acd3259166e>

- Data from Pubchem:

<https://pubchem.ncbi.nlm.nih.gov/compound/13387>