



Version 1.1

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SDS Record Number: TCO-010-162916

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

1.1 Product identifier:

Identification on the label/Trade name: MCDEA
Additional identification: Nanoform is NOT covered by this SDS.
Identification of the product: CAS#106246-33-7 EC#402-130-7
Index Number: Not available.
REACH registration No.: Not available.

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

1.2.1 Identified uses:

Used as intermediates.
PC 1: Adhesives, sealants
PC 32: Polymer preparations and compounds
SU 12: Manufacture of plastics products, including compounding and conversion
SU 13: Manufacture of other non-metallic mineral products, e.g. plasters, cement
SU 17: General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment

1.2.2 Uses advised against:

No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): Chemical Inspection & Regulation Service Limited
Supplier(Manufacturer): THE HANSON GROUP LLC
Address: 3044 ADRIATIC COURT PEACHTREE CORNERS,
GA 30071
Contact person(E-mail): andrea@thehansongroup.com
Telephone: +1-770.495.9554
Fax:

1.4 Emergency telephone Number:

CHEMTREC 1-800-424-9300 (CCN): 1021459

Available outside office hours? YES ☒ NO ☐

Section 2 Hazards identification

2.1 Classification of the substance or mixture:

2.1.1 Classification of the substance:

The substance is classified as following according to REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Aquatic Chronic 4	H413

For full text of H- phrases: see section 2.2.

2.2 Label elements:

Hazard pictogram(s):	No hazard pictogram is used.
Signal word:	No signal word is used.
Hazard statement(s):	H413: May cause long lasting harmful effects to aquatic life.
Precautionary statement(s):	P273: Avoid release to the environment. P501: Dispose of contents/container in accordance with local/regional/national/international regulations.
Supplemental Hazard information (EU)	Not applicable.

2.3 Other hazards:

The substance is not PBT / vPvB.

The substance is not identified as having endocrine disrupting properties.

Section 3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)
MCDEA	-----	106246-33-7	402-130-7	100%	N/A

Section 4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

4.1.2 In case of skin contact:

Wash off with soap and plenty of water. Consult a physician.

4.1.3 In case of eyes contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

4.1.4 In case of ingestion:

Never 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:

The product is not classified as harmful to human health effect.

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

If skin irritation or rash occurs, get medical advice/attention.

Section 5 Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Oxides of carbon.

5.3 Advice for firefighters:

Self-contained breathing apparatus with full-face mask and full protective clothing (standard wear).

Section 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

6.1.2 For emergency responders: Wear an appropriate NIOSH/MSHA approved respirator if vapour is generated.

6.2 Environmental precautions:

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up:

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections:

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Section 7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures: Avoid contact with skin and eyes. Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

7.3 Specific end use(s):

Not applicable.

Section 8 Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=0.625 mg/m ³
Workers - Hazard via dermal route	Systemic effects-Long term exposure	DNEL=0.177 mg/kg bw/day
General Population - Hazard via inhalation route	Systemic effects-Long term exposure	DNEL=0.11 mg/m ³
General Population - Hazard via dermal route	Systemic effects-Long term exposure	DNEL=63.3 µg/kg bw/day
General Population - Hazard via oral route	Systemic effects-Long term exposure	DNEL=63.3 µg/kg bw/day
Hazard for aquatic organisms	Freshwater	PNEC=20 ng/L
Hazard for aquatic organisms	Marine water	PNEC=2 ng/L
Hazard for aquatic organisms	STP	PNEC=1 mg/L
Hazard for aquatic organisms	Sediment (freshwater)	PNEC=39.1 µg/kg sediment dw
Hazard for aquatic organisms	Sediment (marine water)	PNEC=3.91 µg/kg sediment dw
Hazard for terrestrial organisms	Soil	PNEC=7.8 µg/kg soil dw

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection: Safety goggles.

Skin protection

Hand protection: Handle with gloves.

Body protection: Standard work wear and safety boots for normal handling and use.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a

dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards:

Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment. According to local regulations, Federal and official regulations.

Section 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	Granule
Colour:	Off-white
Odour:	Odorless
Odour threshold:	Not available
pH:	Not available
Melting point/freezing point (°C):	87.7-88.3°C
Boiling point or initial boiling point and boiling range (°C):	> 170 °C
Flash point (°C):	Not available
Evaporation rate:	Not available
Flammability limit - lower (%):	Not available
Flammability (gas, liquid, solid):	Non-flammable
Ignition temperature (°C):	Not available
Lower and upper explosion limit:	Not available
Vapour pressure (25°C):	0.0001 Pa
Relative vapour density:	Not available
Relative Density (g/cm³):	1.24 (20 °C)
Bulk density (kg/m³):	Not available
Solubility in water (g/l, 20°C):	0.02 mg/L
Solubility in other polar and non-polar solvents (g/l, 20°C):	Not available
Partition coefficient n-octanol/water (log Po/w, 20°C):	6.5
Auto-ignition temperature:	> 88 °C
Decomposition temperature:	>= 174 °C
Kinematic viscosity (mm²/s):	1.2 mPa · s (dynamic) (20 °C)
Particle characteristics:	Particle size distribution: <= 2.02 µm: 1.12 %; <= 10.08 µm: 8.55 %; <= 201.5 µm: 1.65 %; >= 2.02 <= 201.5 µm: 97.23 %
Explosive properties:	Non-explosive
Oxidising properties:	No oxidising properties
Molecular Formula:	C ₂₁ H ₂₈ Cl ₂ N ₂
Molecular Weight:	379.37

9.2. Other information:

Fat solubility(solvent-oil to be specified) etc:	standard fat: 17000 mg/100 g solvent (37 °C)
Surface tension:	71.8 mN/m (20.5 °C)
Dissociation constant in water(pKa):	3.23 - 3.63 (20 °C)

Section 10 Stability and Reactivity

10.1 Reactivity:	The substance is stable under normal storage and handling conditions.
10.2 Chemical stability:	Stable at room temperature in closed containers under normal storage and handling conditions.
10.3 Possibility of hazardous reactions:	No dangerous reactions known.
10.4 Conditions to avoid:	Incompatible materials. Heat. Hot surfaces. Flames.
10.5 Incompatible materials:	Strong oxidizing agents.
10.6 Hazardous decomposition products:	Oxides of carbon.

Section 11 Toxicological information

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

Acute toxicity:

LD50(Oral, Rat): > 5000 mg/kg bw

LD50(Dermal, Rat): > 2000 mg/kg bw

LC50(Inhalation, Rat): Not available

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

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

11.2 Information on other hazards

Endocrine disrupting properties The substance is not identified as having endocrine disrupting properties.

Other information Not applicable

Section 12 Ecological information

12.1 Toxicity:

Acute (short-term) toxicity:

LC50(96h, Fish): > 0.02 mg/L

EC50(48h, Crustacea): > 0.02 mg/L

EC50(72h, Algae/aquatic plants): > 1 mg/L

Chronic (long-term) toxicity:

NOEC(Fish): Not available

NOEC(Crustacea): Not available

EC50(Algae/aquatic plants): Not available

12.2 Persistence and degradability: Not readily biodegradable.

12.3 Bioaccumulative potential: BCF: 1668 - 6370 (ca. 0.19 µg/L)

12.4 Mobility in soil: log Koc: 4.29

12.5 Results of PBT and vPvB assessment: The substance is not PBT / vPvB.

12.6 Endocrine disrupting properties: The substance is not identified as having endocrine disrupting properties.

12.7 Other adverse effects: Not available.
12.8 Additional information Not available.

Section 13 Disposal considerations

13.1 Waste treatment methods: Dispose of in accordance with all applicable local and national regulations. Use recovery/recycling where feasible, otherwise incineration is the recommended method of disposal. Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container. Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

Section 14 Transport Information

	Land transport (ADR/RID)	Inland waterways (ADN)	Sea transport (IMDG)	Air transport (ICAO/IATA)
14.1 UN number or ID number	Not regulated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	Not regulated	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es)	Not regulated	Not regulated	Not regulated	Not regulated
14.4 Packing group	Not regulated	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	No	No	No	No
14.6 Special precautions for user	See section 2.2	See section 2.2	See section 2.2	See section 2.2
14.7 Maritime transport in bulk according to IMO instruments	Not regulated	Not regulated	Not regulated	Not regulated

Section 15 Regulatory information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

15.2 Chemical Safety Assessment YES ☒ NO ☐

Section 16 Other information

16.1 Indication of changes:

Version 1.0 Amended by (EU) 2020/878, (EU) 2023/707

16.2 Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: Code international maritime dangerous goods code

ICAO: International Civil Aviation Organization

IATA: International Air Transport Association

LC50: median lethal concentration

EC50: The effective concentration of substance that causes 50% of the maximum response.

NOEC: No Observed Effect Concentration

DNEL: derived no-effect level

PNEC: predicted no-effect concentration

16.3 Key literature references and sources for data

ECHA Registered substances data

16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC)

1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008		Classification procedure
Aquatic Chronic 4	H413	On basis of test data

16.5 Relevant H-statements (number and full text):

H413: May cause long lasting harmful effects to aquatic life.

16.6 Training instructions:

Not applicable.

16.7 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.8 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.