



Comet Chemical Company Ltd.  
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# Material Safety Data Sheet

## N-METHYL PYRROLIDONE

Revision Date: 2008/07/10

### Section 1 : PRODUCT AND COMPANY IDENTIFICATION

**Chemical family:** Not available.

**Product uses:** Solvent.

**Product name:** n-Methyl Pyrrolidone

**Supplier:** Comet Chemical Ltd.  
3463 Thomas Street  
Innisfil, On.  
L9S 3W4.

**Supplier 24 hour phone number:** (705)436-5580 – weekdays from 8:00-5:00.  
(800)567-7455 all other times (Newalta Services).

### Section 2 : INGREDIENT INFORMATION

C.A.S.	CONCENTRATION %	Ingrédient	V.L.E.	DL/50	CL/50
872-50-4	100	N-METHYL PYRROLIDONE	NOT AVAILABLE	3914 MG/KG RAT ORAL  5130 MG/KG MOUSE ORAL  8000 MG/KG RABBIT DERMAL	NOT AVAILABLE

### Section 2A: ADDITIONAL INGREDIENT INFORMATION

**Note:** (supplier).  
CAS# 872-50-4: LD50 3900 mg/kg rat oral.

### Section 3 : HAZARD IDENTIFICATION

**Route of entry:** Eye contact, skin contact, skin absorption, inhalation and ingestion.

#### Effects of acute exposure

**Eye contact:** Irritant.  
May cause permanent visual impairment.  
May cause corneal clouding.

**Skin contact:** Mild irritant.

**Skin absorption:** No adverse effects are expected with normal use.  
May be absorbed through the skin.

- Inhalation:** Irritant.  
Breathing difficulty.  
May cause fatigue.
- Ingestion:** May cause nausea and vomiting.
- Effects of chronic exposure:** May cause dermatitis.  
May cause weakness.  
May cause loss of appetite and weight loss.
- Sensitization to product:** No
- Carcinogenic effects:** Not listed as a carcinogen.
- Reproductive effects:** No effects reported.
- Teratogenicity:** No effects reported.
- Mutagenicity:** No effects reported.
- Synergistic materials:** Enhances skin penetration of various substances (used for this purpose in pharmaceuticals).

#### Section 4 : FIRST AID MEASURES

- Skin contact:** Wash thoroughly with soap and water.  
Remove contaminated clothing.  
Consult a physician if irritation persists.
- Eye contact:** Flush eyes with clear, running water for 15 minutes while holding eyelids open. If irritation persists, consult a physician.
- Inhalation:** Remove victim to fresh air. If not breathing, qualified personnel should administer artificial respiration. Get medical attention.
- Ingestion:** Obtain immediate medical attention.  
Never give anything by mouth to an unconscious person.  
Keep head lower than hips to prevent aspiration.  
Keep at rest.  
If conscious, give large amounts of water and induce vomiting.
- Additional information:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any inaccuracies.

#### Section 5 : FIRE FIGHTING MEASURES

- Flammability:** Combustible.
- Conditions of flammability:** Heat, sparks and open flames.
- Extinguishing media:** Dry chemical.  
Foam  
Water fog.  
Do not use water jet.
- Special procedures:** Firefighters should wear adequate protective gear.  
Self-contained breathing apparatus required.  
Use water spray to cool fire exposed containers.
- Auto-ignition temperature (°C):** 270°C

**Flash point (°C), method:** Closed Cup.  
93°C

**Lower flammability  
limit (% vol):** 1.3%

**Upper flammability  
limit (% vol):** 9.5%

#### **Explosion Data**

**Sensitivity to static discharge:** Not sensitive.

**Sensitivity to mechanical impact:** Not sensitive.

**Hazardous combustion products:** Carbon monoxide (CO).  
Smoke  
Nitrogen oxides (NO<sub>x</sub>).

**Rate of burning:** Not available.

**Explosive power:** Not available.

### **Section 6 : ACCIDENTAL RELEASE MEASURES**

**Leak/Spill:** Eliminate all sources of ignition.  
Dike area to prevent spreading.  
Ventilate area.  
Wear appropriate protective equipment.  
Ground handling equipment.  
Use non-sparking tools.  
Explosion proof motors are recommended.  
Soak up with inert absorbent.  
Pump to containers or soak up on inert absorbent.  
Place in a closed container for disposal.  
Do not flush to sewer.


### **Section 7 : HANDLING AND STORAGE**

**Handling procedures and  
equipment:** Keep away from heat, sparks, and open flame.  
Avoid breathing vapors/mists.  
Use adequate ventilation.  
Wear personal protective equipment appropriate to task.  
Use proper grounding procedures.  
Avoid contact with skin, eyes and clothing.  
Do not cut, grind, weld or drill on or near containers.  
Launder contaminated clothing prior to reuse.  
Do not ingest.

**Storage requirements:** Store away from all sources of ignition.  
Store away from incompatible materials.  
Store in a cool, dry and well ventilated area.

### **Section 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### **Precautionary Measures**

**Gloves/Type:** 

Butyl rubber.

**Respiratory/Type:** None required under normal use.  
If TLV is exceeded.




NIOSH approved organic vapors.

**Eye/Type:** 

Safety glasses with side-shields.



Chemical safety goggles.

**Footwear/Type:** 

Impervious boots.

**Clothing/Type:** Long sleeve shirt, long trousers.



Impervious apron.  
When splashing is possible.

**Other/Type:** Eye wash facility should be in close proximity.  
Emergency shower should be in close proximity.

**Ventilation requirements:** As needed to stay below TLV.

**Exposure limit of material:** Not available for mixture, see the ingredients section.

## Section 9 : PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Appearance & odor:** Clear  
Hygroscopic.  
Faint amine odor.  
Colorless.

**Odor threshold (ppm):** Not available.

**Vapour pressure (mmHg):** 0.029 mmHg, 0.039 kPa @ 20°C

**Vapour density (air=1):** 3.4

### Volatiles (%)

**By volume:** Not available.

**Evaporation rate (butyl acetate = 1):** Not available.

**Boiling point (°C):** 203°C

**Freezing point (°C):** -24°C

**pH:** (10% solution).  
7.7-8.0

**Specific gravity @ 20 °C:** 1.03 (20°C)

**Solubility in water (%):** Complete.  
(soluble in most organic solvents; moderately in aliphatic hydrocarbons).

**Coefficient of water\oil dist.:** Not available.

**VOC:** Not available.

#### Section 10 : STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

**Conditions of instability:** Contact with incompatible substances.  
Oxidized to hydroperoxides in air, this process is faster on exposure to sunlight.

**Hazardous polymerization:** Will not occur.

**Incompatible substances:** Acids  
Alkalies.  
Strong oxidizing agents.

**Hazardous decomposition products:** See hazardous combustion products.

#### Section 11 : TOXICOLOGICAL INFORMATION

**LD50 of product, species & route:** 3900 mg/kg rat oral.  
8000 mg/kg rabbit dermal.  
5300 mg/kg mouse oral.

**LC50 of product, species & route:** Not available.

#### Section 12 : ECOLOGICAL INFORMATION

**Environmental toxicity:** No data at this time.

**Environmental fate:** No data at this time.

#### Section 13 : DISPOSAL CONSIDERATIONS

**Waste disposal:** In accordance with municipal, provincial and federal regulations.  
May be incinerated.

#### Section 14 : TRANSPORT INFORMATION

**TDG classification:** Not regulated.

**Special shipping information:** See transportation information.

**Section 15 : REGULATORY INFORMATION**

**WHMIS classification:**

B3, D2B.



**DSL status:** Appears on DSL.

**Section 16 : OTHER INFORMATION**

**Supplier MSDS date:** 2008/07/10

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