VANADOMOLYBDATE REAGENT

Issued: 07/12/00 Revision No: 1

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### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Product name:** VANADOMOLYBDATE REAGENT

**Product code:** RC5110

Use / description of product: Corrosive. Fuming liquid.

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

**Ingredient 1:** NITRIC ACID 10-30%

CAS: 7697-37-2 EINECS: 231-714-2 [O] R8; [C] R35;

**Ingredient 2:** RAW AMMONIUM METAVANADATE <10%

CAS: 7803-55-6 EINECS: 232-261-3

 $[T]\ R23/24/25;\ [Xi]\ R36/37;\ [Xi]\ R41;$ 

**Ingredient 3:** RAW AMMONIUM DIMOLYBDATE <10%

CAS: 7782-91-4 EINECS: 231-970-5 [Xi] R36/37/38;

# 3. HAZARDS IDENTIFICATION

Main hazards: Causes burns.

### 4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: Severe burns may occur. Blistering may occur. Progressive ulceration will occur if

treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanant damage.

Ingestion: Corrosive burns may appear around the lips. Nausea and stomach pain may occur.

There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. There may

be congestion of the lungs causing severe shortness of breath.

### 4. FIRST AID MEASURES (ACTION)

Skin contact: Drench the affected skin with running water for 10 minutes or longer if substance is still

on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist

examination.

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Ingestion: If conscious, give 1 pint of water to drink immediately. Transfer to hospital as soon as

possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Transfer to

hospital as soon as possible.

# 5. FIRE-FIGHTING MEASURES

Extinguishing media: Water ONLY

**Exposure hazards:** In combustion emits toxic fumes.

**Protection of fire-fighters:** Wear self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of

SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

**Environmental precautions:** Do not allow large quantities to enter local drainage systems Do not discharge into

drains or rivers.

Clean-up procedures: Neutralise with dilute sodium hydroxide solution testing with litmus paper periodically.

Wash down the drain with large amounts of water. Wash the spillage site with large

amounts of water.

# 7. HANDLING AND STORAGE

Handling requirements: Avoid direct contact with the substance.

**Storage conditions:** Keep container tightly closed. Store in cool, well ventilated area.

Suitable packaging: Must only be kept in original packaging. Do not use steel containers.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering measures:** Ensure there is sufficient ventilation of the area.

**Respiratory protection:** Positive pressure hood

**Hand protection:** Protective gloves.

Eye protection: Safety goggles. Face-shield.

**Skin protection:** Protective clothing with elasticated cuffs and closed neck.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

State: Fuming liquid.

Colourness to pale yellow

Odour: Odourless

Viscosity: Non-viscous

Oxidising: Non-oxidising (by EC criteria)

**Evaporation rate:** Slow

Solubility in water: Miscible in all proportions

**pH:** 0-1

#### 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to avoid: Heat.

Materials to avoid: Bases. Combustibles

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Haz. decomp. products: In combustion emits toxic fumes.

# 11. TOXICOLOGICAL INFORMATION

**Ingredient 2:** RAW AMMONIUM METAVANADATE

IHL RAT LD50 7800μg/kg
IPR RAT LD50 18mg/kg
IVN RAT LD50 3690mg/kg
ORL MUS LD50 25mg/kg
ORL RAT LD50 581000μg/kg
SCU RAT LD50 23mg/kg
SKN RAT LD50 2102mg/kg

# 12. ECOLOGICAL INFORMATION

Mobility: Non-volatile.

Persistence and degradability: Biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential.

Other adverse effects: Harmful to aquatic organisms. Harmful to animals.

### 13. DISPOSAL CONSIDERATIONS

Waste disposal: Neutralise with excess sodium bicarbonate solution. Flush liquors to drain, local

regulations permitting, or send to a waste water treatment plant.

**Disposal of packaging** Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations

regarding disposal.

### 14. TRANSPORT INFORMATION

### ADR / RID

**UN no:** 3264

ADR Class: 8
Hazard ID no: 80
Labelling: 8

Shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

### IMDG / IMO

**UN no:** 3264

Class: 8

Packing group: II

**EmS:** 8-15

Marine pollutant: YES

Labelling: 8

### IATA / ICAO

**UN no:** 3264

Class: 8

Packing group: II

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**Packing instructions:** 812

**Quantity** 30 L **Labelling:** 8

# 15. REGULATORY INFORMATION

Hazard symbols: Corrosive.

**Risk phrases:** R34: Causes burns.

**Safety phrases:** S2: Keep out of the reach of children.

S24/25: Avoid contact with skin and eyes.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

**Note:** The regulatory information given above only indicates the principal regulations

specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or

provisions.

# 16. ADDITIONAL INFORMATION

Risk phrases used in s.2: R8: Contact with combustible material may cause fire.

R35: Causes severe burns.

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed.

R36/37: Irritating to eyes and respiratory system.

R41: Risk of serious damage to eyes.

R36/37/38: Irritating to eyes, respiratory system and skin.

Legal disclaimer: 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 damage

resulting from handling or from contact with the above product.