I. PRODUCT IDENTIFICATION

PRODUCT NAME: Dissolved Oxygen Regent
CHEMICAL NAME: Manganese Sulfate, Monohydrate
FORMULA: MnSO4•H2O

II. INGREDIENTS

Manganese Sulfate Monohydrate

PICT: 100
CAS NO: 10036-46-5
SARA: LISTED
TLV: 5 mg/m³ as Mn
PEL: C: 5 mg/m³ as Mn

Hazard: Systemic poison by inhalation.

III. PHYSICAL DATA

STATE: solid
APPEARANCE: Pink powder
ODOR: Not determined
SOLUBILITY IN: WATER: Soluble
ACID: Not determined
OTHER: Not determined
BOILING POINT: NA
MELTING PT.: >400°C
SPEC GRAVITY: HD: 14.5 at 25°C
LD: 13.5 at 25°C
VAPOR PRESSURE: Not applicable
VAPOR DENSITY (air): 3.7
EVAPORATION RATE: NA
METAL CORROSIVITY: Aluminum: 0.002 in/yr
STEEL: HD: STABILITY: Stable
STORAGE PRECAUTIONS: Store in a cool, dry place.

IV. FIRE, EXPLOSION HAZARD AND REACTIVITY DATA

FLASH PT.: Not applicable
METHOD: NA
FLAMMABILITY LIMITS - LOWER: NA
UPPER: NA
SUPTETSTIBILITY TO SPONTANEOUS HEAT: None
SHOCK SENSITIVITY: None
AUGITION PT.: NA
EXTINGUISHING MEDIA: Water, carbon dioxide, or dry chemical
FIRE/EXPLOSION HAZARDS: May emit toxic fumes in fire
HAZARDOUS DECOMP. PRODUCTS: May emit toxic fumes of sulfur oxides in fire
OXYGENATOR: None
NFPA CODES: Health: 2 Flammability: 0 Reactivity: 1
CONDITIONS TO AVOID: Heat, moisture; contact with aluminum or magnesium

V. HEALTH HAZARD DATA

This product may be: irritating to eyes, skin and respiratory tract.

ACUTE TOXICITY: Moderately toxic
TARGET ORGANS: Central nervous system

CHRONIC TOXICITY: Cumulative poison
TARGET ORGANS: Central nervous system, blood

CANCER INFORMATION: Experimental neoplasms formation (benign or malignant tumors)
ROUTES OF EXPOSURE: Inhalation
TARGET ORGANS: Central nervous system, blood

OVEREXPOSURE: Sleepiness, weakness in legs, mask-like facial expression, muscle-twitching, slurred speech. May cause or contribute to upper respiratory infections or pneumonia. Manganese has been reported to cause blood changes.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Alcoholism, liver dysfunction, psychiatric disease, disease of the nervous system or respiratory tract.

VI. PRECAUTIONARY MEASURES

Avoid contact with eyes and skin.

Do not breathe dust.

Wash thoroughly after handling.

PROTECTIVE EQUIPMENT: Adequate ventilation, lab grade goggles, disposable gloves

VII. FIRST AID

EYE AND SKIN CONTACT: Immediately flush eyes with water for 15 minutes. Call physician. Flush skin with plenty of water.

INHALATION: Give large quantities of water. Call physician immediately.

INHALATION: Remove to fresh air. Give artificial respiration if necessary. Call physician.

VIII. SPILL AND DISPOSAL PROCEDURES

IN CASE OF SPILL OR RELEASE: Sweep up powder. Avoid breathing material. Dissolve in water. Flush down the drain with excess water.

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.

IX. TRANSPORTATION DATA

D.O.T. PROPER SHIPPING NAME: Not Currently Regulated
HAZARD CLASS: Not applicable
ID: NA

I.C.A.O. PROPER SHIPPING NAME: Not Currently Regulated
HAZARD CLASS: NA
ID: NA GROUP: NA

I.M.O. PROPER SHIPPING NAME: Not Currently Regulated
HAZARD CLASS: NA
ID: NA GROUP: NA

X. REFERENCES

5) Technical Judgment

SARA: This product contains a chemical or chemicals subject to the reporting requirements of section 313 of title 40 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.