



CHEMICAL METAPHOSE 3IN1 - TECHNICAL DATA SHEET

Supplier: - M&S Industrial Solutions Pvt Ltd – (China)

Product Identifier: METAPHOSE 3IN1

Recommended Use: Chemical cleaning solution (aqueous acidic cleaner)

Restrictions on Use: Do not mix with alkalis / carbonates / oxidizers. Avoid contact with metals that generate hydrogen.

INFORMATION ON INGREDIENTS

Component	Concentration (%)	CAS No.
Acid Base	10 - 50	-
Surfactant	1 - 20	-

Hazards Identification

- **Classification:** Corrosive
- **Hazards:**
 - Irritating to eyes and skin.
 - Possible risk of irreversible effects.
 - May cause sensitization through skin contact.

FIRST AID MEASURES

Symptom/Exposure	Action
Eyes: Irritation, redness, watering, possible burns.	Wash immediately with water for 15 minutes. Seek medical attention immediately.
Skin: Irritation, redness.	Wash with water. Seek medical attention if irritation persists or contact is severe.
Ingestion: Stomach pain, nausea, burns to mouth/throat.	Do not induce vomiting. Seek immediate medical attention.
Inhalation: Shortness of breath, sore throat.	Move to fresh air. Seek medical attention if symptoms persist.

FIRE FIGHTING MEASURES

- **Flammability:** Non-flammable.
- **Extinguishing Media:** Suitable for surrounding fire sources.

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- **Hazards:** Noxious fumes may be produced during combustion.
- **Precautions:** Firefighters should use breathing apparatus.

ACCIDENTAL RELEASE MEASURES

- **Precautions:**
 - Wear protective clothing, gloves, and eye/face protection.
 - Avoid splashing.
- **Environmental Protection:**
 - Prevent entry into drains, sewage, or water bodies.
- **Treatment:**
 - Absorb with neutral medium (sand, earth, granules). Dispose of appropriately.
 - Neutralize with soda ash or similar material, if required.

HANDLING & STORAGE

- Avoid skin and eye contact.
- Use protective clothing and respiratory protection.
- Wash hands after handling.
- Store away from strong alkalis, carbonates, food, and sodium nitrite solutions.

EXPOSURE CONTROL / PERSONAL PROTECTION

- **Engineering Controls:** Exhaust ventilation for sprays.
- **Eye Protection:** Safety glasses, goggles, or face mask.
- **Skin Protection:** Rubber or PVC gloves, protective overalls.
- **Respiratory Protection:** Required if mist or aerosol inhalation is possible.

PHYSICAL & CHEMICAL PROPERTIES

- **Appearance:** Clear, aqueous acidic solution.
- **Odor:** Characteristic.
- **Relative Density:** 1.29
- **pH:** Approx. 3 (Concentrate); Approx. 3 (10% working solution).
- **Solubility:** Fully miscible with water.

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- **Flammability:** Non-flammable.

STABILITY & REACTIVITY

- **Conditions to Avoid:** None under normal use.
- **Materials to Avoid:** Reacts with metals to form hydrogen gas.
- **Decomposition Products:** None known.

TOXICOLOGICAL INFORMATION

- **Eyes:** Irritation burns possible.
- **Skin:** Irritation, rash, potential sensitization.
- **Inhalation:** Aerosol/mist may cause respiratory irritation.
- **Ingestion:** Burns to mouth/throat, internal damage.

ECOLOGICAL INFORMATION

- Contains zinc cations and phosphate anions.
- Avoid discharge into water bodies without proper treatment.

DISPOSAL CONSIDERATIONS

- Consult local water authorities about disposal guidelines.
- Use licensed waste disposal contractors for concentration, working solutions, or sludge.

TRANSPORT INFORMATION

UN Class	Packing Group	IMDG
1805	8	II

REGULATORY INFORMATION

- This data sheet supports risk assessment preparation but does not replace the need for comprehensive risk assessments.

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OTHER INFORMATION

- This information pertains to concentration. Hazards may vary based on dilution, processed chemicals, and operating conditions.
- The details provided are based on current knowledge but do not guarantee specific product features or establish contractual obligations.

DISCLAIMER

The above data are typical values based on provided test requirements and standard application conditions. Actual performance may vary with substrate condition, surface preparation, film build, ambient conditions, and application technique.

(M&S Industrial Solutions Pvt Ltd)

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