



# Material Safety Data Sheet

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## SECTION 1 - Product and Company Identification

Product Name: ECOS Paints EMR/ELF Radiation Shielding Paint  
Description: EMR Radiation shielding paint for walls/ceilings  
Document ID: 10033 R 1.2  
Document Date: 04-07-2013  
Document Version: R1.2  
Manufacturer: Imperial Paints  
Address: PO Box 489, Fairforest, SC, 29336  
Contact: 864.595.3840

## SECTION 2 - Hazards Identification

Hazardous Ingredient: Nickel (Ni)  
Calculated % by weight: 26.4%  
CAS: 7440-02-0

## SECTION 3 - Composition/Information on Ingredients

Chemical nature: Water-borne, electrically conductive paint.

Ingredients:

Water, acrylic dispersion, thickeners – cellulosic and polymeric, dispersing aids (various), nickel.

Hazardous components: Nickel – see Section 2.

VOCs/Solvents: None.

## SECTION 4 - First Aid Measures

Eye contact: May cause irritation.  
Irrigate with water for 15 minutes holding eyelid open.  
Seek medical attention if irritation persists.

Skin contact: Prolonged contact may cause irritation and may lead to nickel sensitivity which can result in allergic skin rashes.  
Remove contaminated clothing.  
Wash thoroughly with soap and warm water.

Inhalation of vapor: No hazard. Avoid inhalation of powdered product when sanding, or otherwise grinding dry product.

## SECTION 5 - Fire Fighting Measures

Product is water based and not combustible when wet or dry.

# Material Safety Data Sheet

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## SECTION 6 - Accidental Release Measures

Personal protection: Refer to Section 8  
Environmental precautions: Prevent product entering soil, natural waters, and drains.  
Cleaning and taking up: Large spillages should be contained and pumped into a receiving vessel.  
Small spillages should be absorbed on inert absorbent.  
For disposal methods refer to Section 13

## SECTION 7 - Handling and Storage

Handling: Avoid repeated skin contact. Wear suitable gloves. Securely cover open wounds. Wash skin thoroughly after handling. Launder clothing and gloves as needed.  
Storage: Store between +5°C and 20°C protected from frost and direct sunlight. Do not use storage vessels or pipe work made of aluminum, copper or their alloys. Detailed advice on storage systems can be provided.

## SECTION 8 - Exposure Controls/Personal Protection

Workplace parameters: Staff should be aware of personal protective equipment notices, below.  
Personal protective equipment:  
Respiratory protection: Avoid inhalation. If sanding, or otherwise generating airborne particles, wear a NIOSH-approved respirators selected according to OSHA 29 CFR 1910.134. Maintain airborne nickel levels as low as possible.  
Hand protection: Wear suitable gloves. Securely cover open wounds.  
Eye protection: Advisory.  
Skin protection: Wear suitable covering clothing and securely cover open wounds.  
Hygiene measures; Wash skin thoroughly after handling. Launder clothing and gloves as needed.

## SECTION 9 - Physical and Chemical Properties

Physical form: Liquid – paste  
Color: Dark gray when wet and dry.  
Odor: Faint – none  
Flash point: Not applicable  
Vapor pressure: 23hPa @ 20°C  
Relative density: 1.0 – 1.4  
Solubility in water: Insoluble but miscible in all proportion  
PH: 8 – 11  
Viscosity: Variable  
Flammability: Non-flammable.

# Material Safety Data Sheet

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## SECTION 10 - Stability and Reactivity

The product is stable under recommended storage conditions – see Section 7  
Incompatible materials: None

## SECTION 11 - Toxicological Information

Long term experience of this product type indicates no danger to health when properly handled under normal conditions.

## SECTION 12 - Ecological Information

Degradation/elimination: Except for the nickel content, the product can be virtually eliminated from water by abiotic processes, e.g. adsorption onto activated sludge. Nickel may be removed by centrifuge or gravity, applied to the water-diluted (10:1) product.

Bioaccumulation: No evidence for bioaccumulation.

Eco-toxic effects: No long term effects expected.

## SECTION 13 - Disposal Considerations

Waste product should not be discharged directly into drains or waterways without treatment. Disposal of product and packaging should always comply with local and national regulations. Waste water containing product should have the nickel removed by centrifuge or gravity (applied to the 10:1 diluted product) and may then be treated in a separation and biological treatment plant.

## SECTION 14 - Transport Information

The product is not classified as Dangerous for Carriage. It is:

- ✓ Non-HAZMAT
- ✓ Non-toxic
- ✓ Non-flammable

## SECTION 15 - Regulatory Information

Some US States and other organizations consider Nickel (CAS # 7440-02-0) and/or compounds of nickel, to be a chemical you should be notified of, because of its potential hazard.

# Material Safety Data Sheet

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## SECTION 16 - Other Information

### HMIS (Hazardous Materials Identification System) Information

Health	0
Flammability	0
Physical Hazard	0
Personal Protection	See Section 8 - Exposure Controls/Personal Protection

### Note on hazards from lead paint:

Older buildings may contain lead-based paint, which requires professional remediation if it is disturbed. If in doubt, consult with a professional from a Lead-Safe Certified Firm.

### Disclaimer

*At the time of publishing (as per document date in Section 1), all the enclosed data and information was believed to be complete and accurate, and is provided in good faith. It is the responsibility of the reader to ensure that they have all the information they need to ensure the health and safety of them themselves and their employees. Such determination must be in accordance with all applicable local and federal laws and regulations.*

