

I. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

TRADE NAME: NANO PRIMER/ SEALER

PRODUCT USE: AS acrylic primer/sealer coat for roof waterproof system including foam roofs, previously coated with a silicone base membrane or bitumen membranes.

MANUFACTURE’S NAME: MIS CHEMICAL INDUSTRIES LLC TEL 97143511046 PLOT NO 698-645, Dubai Investment Park-1, PO BOX 11756, Dubai, United Arab Emirates

EMERGENCY NUMBER: 97143511046 Email: info@orbitcoatings.ae

II. HAZARDS IDENTIFICATION: CLASSIFICATION: Flammability 2, Reactivity 5, Health 3

ROUTE OF ENTRY: Absorption, Eye contact, Ingestion, Inhalation, Skin contact.

CARCINOGENIC STATUS: Not considered carcinogenic by NTP, IARC, and OSHA.

TARGET ORGANS: Eye, Skin, Lung, Liver, Kidney, Central nervous system, reproductive.

HEALTH EFFECTS- EYE: Liquid, mist, or vapor will cause conjunctival irritation and possibly corneal damage. Severely irritating.

HEALTH EFFECTS – SKIN: Material may cause irritation. The liquid is absorbed through the skin in toxicologically significant amounts if the area of contact is large and exposure is prolonged. Repeated or Prolonged contact may produce defatting of the skin leading to irritation and dermatitis.

HEALTH EFFECTS–INGESTION: Aspiration during swallowing or vomiting may severely damage the lungs. Swallowing may have the following effects: irritation of the mouth, throat, and digestive tract, headache dizziness, drowsiness, and intoxication.

HEALTH EFFECTS – INHALATION: Exposure to vapor at high concentrations may have the following effects: dizziness, headache, drowsiness, intoxication, and anesthesia.

III. COMPOSITION/INFORMATION ON INGREDIENTS:

HAZARDOUS INGREDIENTS	CAS NUMBER	WEIGHT %	TWA	LD50	LC50
			Ppm	ORAL RAT Mg/kg	INHAL RAT ppm
Pure acrylic	25133-97-5.	40-60	2	400	250
Water	7732-18-5	30-40	72	90 g/kg	56 g/kg
Calcium Carbonate					

IV. FIRST AID MEASURES FIRST AID – INHALATION: Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately. Repeated exposure may cause liver and kidney damage.

FIRST AID – SKIN: Immediately flood the skin with large quantities of water, preferably under a shower. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists. Repeated exposure may cause liver and kidney damage.

FIRST AID – EYE: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

FIRST AID – INGESTION: Have victim drink 1 – 3 glasses of water or preferably milk to dilute stomach content and slow absorption. DO NOT INDUCE VOMITING. If there is difficulty in breathing give oxygen. Obtain medical attention. If the victim vomits keep person in leaning position (victim’s head below the hips) to avoid aspiration of vomit. Repeated exposure may cause liver and kidney damage.

INFORMATION FOR DOCTOR Most important symptoms and effects, both acute and delayed. No further relevant information. Indications of any immediate medical attention and special treatment needed. No further relevant information is available.

V. FIREFIGHTING MEASURES

CONDITIONS OF FLAMMABILITY: FLAMMABLE LIQUID. Fire hazard. Avoid heat, sparks, open flame, and other sources of ignition. Vapor may form an explosive mixture with air.

EXTINGUISHING MEDIA: Use foam, dry chemicals, water fog, carbon dioxide, and water spray only to cool fire-exposed containers. Product floats on water – water jet spreads flames.

SPECIAL HAZARDS OF PRODUCT: This product may give rise to hazardous fumes in a fire. Be aware of the possibility of re-ignition. Containers may explode in the heat of fire. Vapors can travel a considerable distance to a source of ignition and flashback. Dangerous when exposed to heat or flame.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTING: Wear full protective clothing and self-contained breathing apparatus.

EXPLOSION DATA – SENSITIVITY TO IMPACT: Not sensitive.

EXPLOSION DATA – SENSITIVITY TO STATIC DISCHARGE: Will accumulate a static charge on agitation.

VI. ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES: Contain and absorb using earth, sand, or other inert material. Transfer into suitable containers for recovery or disposal.

PERSONAL PRECAUTIONS: Eliminate all sources of ignition. Vapors can accumulate in low areas. Consider need for evacuation.

ENVIRONMENTAL PRECAUTIONS: Prevent the material from entering drains or water courses. Notify authorities if a spill has entered the watercourse or sewer or has contaminated soil or vegetation.

REFERENCES TO OTHER SECTIONS See Section 7 for information on safe handling See Section 8 for information on personal protection equipment See Section 13 for disposal information

VII. HANDLING AND STORAGE

HANDLING Use in a well-ventilated area. Use local exhaust ventilation. Avoid inhaling vapor. Avoid contact with eyes, skin, and clothing. Keep the container tightly closed when not in use.

STORAGE: Store away from sources of heat or ignition. The storage area should be cool, dry, well-ventilated, out of direct sunlight, away from incompatible materials.

INFORMATION ABOUT PROTECTION AGAINST EXPLOSION AND FIRE

Keep ignition sources away – Do not smoke

Protect against electrostatic charges

SPECIFIC END USE(S) No further relevant information is available

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROL MEASURES Exposure to this material may be controlled in several ways. The measures appropriate for a particular worksite depend on how the material is used and on the potential for exposure. If engineering controls and work practices are not effective in preventing or controlling exposure, then suitable personal protective equipment, which is known to perform satisfactorily, should be used.

RESPIRATORY PROTECTION The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator. The following protection is recommended: Respirator equipped with an organic vapor cartridge.

HAND PROTECTION: Full-length Viton gloves must be worn during all handling operations.

EYE PROTECTION: Chemical goggles should be worn during all handling operations.

BODY PROTECTION: Discard contaminated protective equipment. If there is a danger of splashing, wear an overall or apron.

PROTECTION DURING APPLICATION During application, adequate ventilation must be provided. Mix in a well-ventilated area. If ventilation is poor, wear respiratory protection. During application, flames and unsealed lights must be extinguished and adequate ventilation must be provided

IX. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	: Liquid
ODOUR & APPEARANCE	: Clear
ODOR THRESHOLD (ppm)	: Aromatic
SPECIFIC GRAVITY	: 1.1-1.2
VAPOR DENSITY (AIR = 1)	: Not determined
VAPOR PRESSURE 20°C	: Not determined
EVAPORATION RATE	: Not determined
BOILING POINT (°C)	: 110 °C
FREEZING POINT (°C)	: -95°C pH Neutral
COEFFICIENT OF WATER/OIL DISTRIBUTION	: Not determined
SOLUBILITY IN WATER	: Soluble
VOC (g/l)	: NA
FLASH POINT (PMCC) (°C/°F)	: 7°C
UPPER FLAMMABLE LIMIT %VOL	: 7.1
LOWER FLAMMABLE LIMIT %VOL	: 1.2
AUTOIGNITION TEMP (°C/°F)	: 480-550°C

X. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

CONDITIONS TO AVOID: High temperatures, static discharge, exposure to direct sunlight.

MATERIALS TO AVOID: Strong oxidizing agents, Alkalis, Acids, Bases

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, nitrogen oxides, smoke.

XI. TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE: Skin – Irritant, prolonged, and repeated contact can cause defatting and drying of the skin, resulting in irritation and dermatitis. May be absorbed. Eyes – Irritant may cause a burning sensation, redness, swelling, and/or blurred vision. Inhalation – May cause irritation of nasal and respiratory passages, CNS depression, headache, dizziness, nausea, or possibly death. Ingestion – Aspiration of material into the lungs can cause chemical pneumonitis, which can be fatal.

EFFECTS OF CHRONIC EXPOSURE Overexposures of humans produced predominately central nervous system (CNS) effects with less common effects reported to the lung, gastrointestinal tract, liver, kidney and heart.

EXPOSURE LIMITS 100 ppm

TWAEV IRRITANCY Moderate irritation expected

SENSITIZATION No CARCINOGENICITY No known effect in humans

REPRODUCTIVE TOXICITY No known effect in humans

TERATOGENICITY No data available

MUTAGENICITY No data available

TOXICOLOGICALLY SYNERGISTIC PRODUCTS Aggravates existing dermatitis.

XII. ECOLOGICAL INFORMATION

MOBILITY If released to soil, it will evaporate at a moderate rate. The product is absorbed onto soils or sediments. The product will leach into soil. It floats on water.

PERSISTENCE/DEGRADABILITY The product is expected to biodegrade slowly.

BIO-ACCUMULATION The product is not expected to bio-accumulate.

ECOTOXICITY The product may be harmful to aquatic organisms.

RESULTS of PBT and vPvB Assessment PBT: N/A vPvB: N/A

XIII. DISPOSAL CONSIDERATIONS

PRODUCT DISPOSAL Absorb product on an inert material (sand or earth) and transfer absorbed product into a waste container. Dispose of in accordance with all applicable local and national regulations.

CONTAINER DISPOSAL Dispose of bags according to federal, provincial, state and local regulations.

UNCLEANED PACKAGING Recommendation: Disposal must be made according to official regulations

XIV. TRANSPORTATION INFORMATION

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

UN proper shipping name

Proper shipping name AEROSOLS (TRIZINC BIS(ORTHOPHOSPHATE)
(ADR/RID)

Proper shipping name AEROSOLS (TRIZINC BIS(ORTHOPHOSPHATE)
(IMDG)

Proper shipping name AEROSOLS (TRIZINC BIS (ORTHOPHOSPHATE)AEROSOLS
(ICAO)

Proper shipping name (ADN) AEROSOLS (TRIZINC BIS(ORTHOPHOSPHATE)

XV. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Dangerous Substances Directive 67/548/EEC.

Dangerous Preparations Directive 1999/45/EC.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16

December 2008 on classification, labelling and packaging of substances and mixtures (as amended)

Water hazard classification WGK 2

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.