Safety Data Sheet
NanoTech Rust Converter

600-0001_REV02
Updated April 2023

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	NanoTech Rust Converter
Company Name:	NanoTech Innovation Inc.
Website	www.nanotechinnovation.ca
Address	289-2366 Main Mall Vancouver BC, Canada
Phone	+1 (604) 401-6402
Intended Use:	To convert rust, on equipment and pipes, to a protective barrier
Additional Information	NanoTech Nano Rust Converter, a water-based primer, contains two active ingredients. The first ingredient, reacts with iron oxide (rust) and chemically converts it to iron a dark-colored stable material. The second active ingredient, is an organic polymer that provides a protective primer layer. The overall chemical reaction converts rust into a stable, black protective polymeric coating that serves as an excellent primer for both oil and epoxy based paints.

2. HAZARDS IDENTIFICATION

Hazard Rating System:	**Skin Corrosion/Irritation Category 1A-1C ; Eye Damage/Eye Irritation Category 1**
GHS Signal Word:	**SAFE**
GHS Precaution Phrases:	H314: Causes severe eye damage. H318: Causes serious eye damage. P260: Do not breathe gas/mist/vapors/spray. P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye
GHS Response Phrases:	P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER or doctor/physician. P321: Specific treatment see label. P363: Wash contaminated clothing before reuse.
GHS Storage and Disposal Phrases:	P405: Store locked up. P501: Dispose of contents/container accorfding to local, state and federal regulations.
GHS Hazard Phrases:	H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage.

OSHA Regulatory Status:	This material is classified as NO HAZARDOUS under OSHA regulations.
Potential Health Effects:	
EYE:	May cause damage, redness, tearing, and irritation.
SKIN:	May result in drying of the skin.
INHALATION:	Inhalation acute exposure effects - may cause irritation of the respiratory tract, including mucous membranes and nasal passages.
INGESTION:	May cause gastrointestinal, irritation, nausea, abdominal pain, vomiting, and diarrhea.
CHRONIC EFFECTS:	Overexposure to diethylene glycol monomethyl ether has apparently been found to cause the following effects in laboratory animals: kidney damage, liver abnormalities, and testis damage.
TARGET ORGANS:	LIVER, RESPIRATORY TRACT, KIDNEY, BLOOD
Medical Conditions:	Medical conditions generally diseases of the skin, eyes, and respiratory system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
HAZARDOUS COMPONENTS (CHEMICAL NAME):	NO HAZARDOUS	XX	XX
Metal oxides	NO HAZARDOUS	XX	XX
Additional Chemical Information	Specific percentage of composition is being withheld as a trade secret.		

4. FIRST AID MEASURES

Emergency and First Aid Procedures:	
Inhalation:	If user experiences breathing difficulty, move to air free of vapors. Administer oxygen or artificial respiration until medical assistance can be reached.
Skin Contact:	Wash with soap and large quantities of water and seek medical attention if irritation from contact persists.
Eye Contact:	Flush with large quantities of water for at least 15 minutes and seek immediate medical attention.
Ingestion:	Call your poison control center, hospital emergency room, or physician immediately for instructions.
Note to Physician:	Call your local poison control center for further instructions.

5. FIRE FIGHTING MEASURES

Flash Pt:	No Flashpoint
Explosive Limits:	No Data
Suitable Extinguishing Media:	Non-combustible liquid - use extinguishing media for underlying cause of fire.
Unsuitable Extinguishing Media:	None known.
Fire Fighting Instructions:	Material is non-combustible, no special procedures required. As in any fire, self-contained respiratory protection should be provided for fire fighters fighting fires in buildings or confined areas.

6. ACCIDENTAL RELEASE MEASURES

Steps To Be Taken in Case Material is Released or Spilled:	Clean Up: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind, out of low areas, and ventilate closed spaces before entering. Keep out of sewers, waterways, and bodies of water. For small spills, take up liquid with sand, earth, or other noncombustible absorbent material and place in a container for disposal. For large spills, dike far ahead of spill and use sand, earth, or other noncombustible absorbent material and then place material in a container for disposal.

7. HANDLING AND STORAGE

Precautions To Be Taken in Handling:	Read carefully all cautions and directions on product label before use. Since empty container retains residue, follow all label warnings even after container is empty. Dispose of empty container according to all regulations. Do not reuse the container.
Precautions To Be Taken in Storing:	Keep container tightly closed when not in use. Store in a cool, dry place. Protect from freezing. Avoid extreme high or low temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7727-43-7	Barium sulfate {(EXEMPT FROM SECTION 313)} {C.I. Pigment white 21; Mineral white; Permanent white}	PEL: 15 (dust); 5 (resp.) mg/m3	TLV: 10 mg/m3	No data.
1401-55-4	Tannic acid	No data.	No data.	No data.

111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	PEL: 50 ppm	TLV: 20 ppm	No data.
107-21-1	Ethylene glycol	No data.	CEIL: 100 mg/m3 (H)	No data.

Respiratory Equipment (Specify Type):	Under normal use conditions and when used as directed, respiratory protection is not needed. For OSHA controlled work place and other regular users. Use only with adequate ventilation under engineered air control systems designed to prevent exceeding appropriate TLV. For occasional use, where engineered air control is not feasible, use properly maintained and properly fitted NIOSH approved respirator for organic solvent vapors to keep vapors below applicable exposure limits. A dust mask does not provide protection against vapors.
Eye Protection:	Safety glasses, chemical goggles or face shields are recommended to safeguard against potential eye contact, irritation, or injury.
Protective Gloves:	Wear gloves with as much resistance to the chemical ingredients as possible. Glove materials such as nitrile may provide protection. Glove selection should be based on chemicals being used and conditions of use. Consult your glove supplier for additional information. Gloves contaminated with product should be discarded and not reused.
Other Protective Clothing:	Various application methods can dictate use of additional protective safety equipment, such as impermeable aprons, etc., to minimize exposure. Before reuse, thoroughly clean any clothing or protective equipment that has been contaminated by prior use.
Engineering Controls (Ventilation etc.):	Use only with adequate ventilation to prevent build-up of vapors. Open all windows and doors. Use only with a cross ventilation of moving fresh air across the work area. If strong odor is noticed or your experience slight dizziness, headache, nausea, or eye-watering - STOP - ventilation is inadequate. Leave area immediately.
Work/Hygienic/Maintenance Practices:	Wash hands thoroughly after use and before eating, drinking, or smoking. Do not eat, drink, or smoke in the work area. Facilities storing or handling this material should be equipped with an emergency eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical States:	Liquid
Auto-ignition Pt:	No data.
Melting Point:	No data.
Boiling Point:	> 212.00 F
Flash Pt:	NE
Explosive Limits:	LEL: No data. UEL: No data.
Specific Gravity (Water = 1):	1.1
Density:	1.3
Appearance and Odor:	BROWN COLOR

Vapor Pressure (vs. Air or mm Hg):	< 1 MM HG
Evaporation Rate:	No data
Solubility in Water:	No data.
Percent Volatile:	N.D.
pH:	6 – 6.5
Vapor Density (vs. Air = 1):	No data.

10. STABILITY AND REACTIVITY

Conditions To Avoid -	No data available.
Stability:	Stable
Incompatibility - Materials	Strong oxidizing agents and strong bases.
Avoid:	Decomposition may produce carbon monoxide, carbon dioxide, aldehydes, ketones, and organic acids.
Hazardous Decomposition or Byproducts: Possibility of Hazard	Will not occur

11. TOXICOLOGICAL INFORMATION

Toxicological Information:

This product has not been tested as a whole. Refer to section 2 for acute and chronic health effects.

CAS# 111-76-2:
Acute toxicity, LC50, Inhalation, Rat, 450.0 PPM, 4 H.
Result:
Behavioral: ataxia.
Nutritional and gross metabolic:weight loss or decreased weight gain.
Toxicology and applied pharmacology, academic press, inc., 1 e. First st., duluth, Mn55802, vol/p/yr: 68,405, 1983
Acute toxicity, ld50, skin, species: rabbit, 220.0 mg/kg.
Result:
Effects on embryo or fetus: extra embryonic structures (e.g., placenta, Umbilical cord).
Effects on embryo or fetus: other effects to embryo.
Specific developmental abnormalities: musculoskeletal system.
Dow chemical company reports., dow chemical usa, health and environment Research, toxicology research lab, midland, mi 48640, vol/p/yr: msd-46, acute Toxicity, ld50, oral, rat, 250.0 mg/kg.
Chronic toxicological effects: result: 25000
Lungs, thorax, or respiration: changes in pulmonary vascular resistance.

Standard draize test, eyes, species: rabbit, 100.0 mg, severe.
Result:
Effects on newborn: apgar score (human only).
Effects on newborn: other neonatal measures or effects.
Effects on newborn: drug dependency.
American journal of ophthalmology., ophthalmic pub. Co., 435 n. Michigan Ave., suite 1415, chicago, il 60611, vol/p/yr: 29,1363, 1946
This product has not been tested as a whole.
Cas # hazardous components (chemical name) ntp iarc acgih Osha

12. ECOLOGICAL INFORMATION

General Ecological Information: No information available for this product as a whole.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with applicable local, state and federal regulations.

Transport hazard class (iata): non hazard west
General: the product is not covered by international regulations on the Transport of dangerous goods.
IATA proper shipping name: paint or paint related material .
IATA hazard class: no applicable
UN/NA number: 142/w463 - water based acrylic line marking paint - all colours

14. TRANSPORT INFORMATION

DOT Proper Shipping Name: Not Regulated by D.O.T.
DOT Hazard Class:
UN/NA Number:
LAND TRANSPORT (US DOT):
Additional Transport Information:

15. REGULATORY INFORMATION

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7727-43-7	Barium sulfate {(EXEMPT FROM SECTION	No	No	Yes-Cat. N040

	313)} {C.I. Pigment white 21; Mineral white; Permanent white}			
1401-55-4	Tannic acid	No	No	No
111-76-2	Ethanol, 2-Butoxy- {Ethylene glycol n-butyl ether, (a glycol ether)}	No	No	Yes-Cat. N230
107-21-1	Ethylene glycol	No	Yes	Yes

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312.

CAS #	**Hazardous Components (Chemical Name)**	**Other US EPA or State Lists**
7727-43-7	Barium sulfate {(EXEMPT FROM SECTION 313)} {C.I. Pigment white 21; Mineral white; Permanent white}	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
1401-55-4	Tannic acid	CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
107-21-1		Ethylene glycol CAA HAP, ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No
Regulatory Information Statement:	All components of this material are listed on the TSCA Inventory or are exempt.	

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