



MATERIAL SAFETY DATA SHEET

'R' NOVA PLUS

HMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS								
<table border="1"> <tr><td>1</td><td>HEALTH</td></tr> <tr><td>1</td><td>FLAMMABILITY</td></tr> <tr><td>0</td><td>REACTIVITY</td></tr> <tr><td>G</td><td>PROTECTIVE EQUIPMENT</td></tr> </table>	1	HEALTH	1	FLAMMABILITY	0	REACTIVITY	G	PROTECTIVE EQUIPMENT		<p align="center">NOT REGULATED</p>
1	HEALTH									
1	FLAMMABILITY									
0	REACTIVITY									
G	PROTECTIVE EQUIPMENT									

SECTION II. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name:	'R' NOVA PLUS
Use:	Polymeric water based paste
Manufacturer:	Soprema Inc. 310 Quadral Drive Wadsworth, Ohio 44281 United States
In case of emergency:	SOPREMA (8:00am to 5:00pm - Eastern time): (800) 356-3521 CHEMTREC (USA) (24h.): (800) 424-9300 CANUTEC (Canada): (613) 996-6666 International: (703) 527-3887

EMERGENCY OVERVIEW!!!
May cause sensitization by skin contact.
May cause eye, respiratory tract and skin irritation.

SECTION II. COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS

Component	CAS#	% by weight	R-phase	Symbol
Titanium dioxide	013463-68-7	2 - 20%		
Turpentine	008006-64-2	1 - 3%	R10, R20/21/22, R36/38, R43, R51/53	Xn, N

SECTION III. POTENTIAL HEALTH EFFECTS

May cause sensitization by skin contact.
May cause eye, respiratory tract and skin irritation.

CARCINOGENICITY

Titanium dioxide:

IARC GROUP 3 – Unclassifiable as to carcinogenicity to humans.

ACGIH GROUP A4- Not classified as a Human Carcinogen

Classified by NIOSH as carcinogenic.

Turpentine:

ACGIH GROUP A4- Not classified as a Human Carcinogen

SECTION IV. FIRST AID MEASURES

SYMPTOMS	May cause irritant to eyes and skin. Inhaling steam in high concentration may have negative effect on respiratory system and lungs. Possible symptoms: headaches, dizziness, vomiting and loss of concentration. Ingestion may cause irritation to mouth and digestion system.
SKIN	Immediately remove contaminated clothing and shoes unless stuck to the skin. Rinse with large amounts of water and soap for at least 10 minutes. Get medical attention as necessary.
EYES	Rinse opened eyes under running water for at least 15 minutes. Get medical attention in case of delayed damage.
INHALATION	Remove to fresh air. If breathing is difficult, give oxygen if possible. If not breathing, give artificial respiration. Get medical attention.
INGESTION	Do NOT induce vomiting. If casualty is conscious, give three cups of water. Get medical attention. Never give anything by mouth to an unconscious person.

SECTION V. FIRE-FIGHTING MEASURES

DANGER OF COMBUSTION

Extinguishing media	CO ₂ for small fires, foam and dry chemicals
Special fire fighting procedures	Use water spray to keep fire-exposed containers cool. Use self-contained breathing apparatus and full protective clothing.

SECTION VI. ACCIDENTAL RELEASE MEASURES

Wear full protective gear before any treatment of the leakage or spill.
Remove all sources of ignition. Provide ventilation. Cover with dry sand, vermiculite or other incombustible absorbent material.
Collect solids into container and send to disposal site according to the local regulations.
Prevent product from entering the sewage system and water sources.

SECTION VII. HANDLING AND STORAGE

Keep away from heat.
Keep away from sources of ignition. **NO SMOKING!**
Do not breathe dust.
Avoid contact with skin and eyes.
Wear suitable protective clothing, gloves and eye/face protection.
Use only in well ventilated area.
Keep the container tightly closed in a cool well ventilated place.

Condition to avoid: direct sunlight and extremes of temperature.

Keep away from: strong oxidizing materials.

SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

THRESHOLD VALUES	<p>For Titanium dioxide OSHA-PEL for 8 hours 15 mg/m³ (TWA)* OSHA-PEL for 8 hours 5 mg/m³ (TWA) ** REL-NIOSH for 8 hours 0.2 mg/m³ (TWA)*** MAC-Ger for 8 hours 6 mg/m³ (TWA) TLV-ACGIH for 8 hours 10 mg/m³ (TWA) *Total dust **Respirable fraction ***Lowest feasible conc.</p> <p>For Turpentine: OSHA-PEL for 8 hours 100 ppm (TWA) TLV-ACGIH for 8 hours 20 ppm (TWA) REL-NIOSH for 8 hours 100 ppm (TWA)</p>
IDLH (Immediately Dangerous to Life and Health):	<p>For Turpentine: up to 30 minutes exposure 800 ppm 1998 NIOSH For Titanium dioxide: up to 30 minutes exposure 5000 mg/m³ 1995 NIOSH</p>
PROTECTIVE EQUIPMENT	<p>Generally, personal protection is a function of exposure. It is recommended to use safety spectacles or goggles, working shoes, working clothes or lab coat. Working should be done in a wellventilated area. In addition: mask and filter for organic compounds and particles, gloves.</p>
IN CASE OF EMERGENCY	<p>Full protective gear and a self-contained breathing apparatus should be used, according to the severity.</p>

SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES

DECOMPOSITION (°C)	below 100
FREEZING POINT (°C)	0 - (-2)
DENSITY (g/cm³ @ 25°C)	1.3 - 1.4
VAPOR DENSITY (air = 1)	Not volatile
VAPOR PRESSURE (mm Hg)	Not volatile
SOLUBILITY (in water)	Insoluble
pH	5-9
FLASH POINT (°C)	Non
AUTO-IGNITION TEMPERATURE (°C)	Non
LEL	Non
UEL	Non

SECTION X. STABILITY AND REACTIVITY

<p>CHEMICAL REACTIVITY: Stable under ordinary use. Keep away from incompatibilities.</p>
<p>INCOMPATIBILITY: Strong oxidizing agents, metals (aluminum, calcium, magnesium, potassium, sodium, zinc, lithium)</p>
<p>HAZARDOUS DECOMPOSTION PRODUCTS: On fire emits titanium oxides, irritating fumes and smoke.</p>
<p>HAZARDOUS POLYMERIZATION: Will not occur.</p>

SECTION XI. TOXICOLOGICAL INFORMATION

For Turpentine:

LD50 (oral rat) 5760 mg/kg
LC50 (inhalation rat) 12000 mg/kg (360 minutes)
LD50 (Intravenous mouse) 1.180 mg/kg

For Titanium dioxide:

TCLo (Inhalation rat) 250 mg/m³ (360 minutes)

SECTION XII. ECOLOGICAL INFORMATION

Environmental hazards: No data available.

Biodegradability: No data available.

SECTION XIII. DISPOSAL CONSIDERATIONS

Waste disposal:

Dispose of in accordance with Federal, State or Local regulations.

SECTION XIV. TRANSPORTATION INFORMATION

Not classified as Hazardous for transport.

SECTION XV. REGULATORY INFORMATION

Indication(s) of Danger and Symbol(s):



SECTION XVI. OTHER INFORMATION

Risk Phrase(s):

R43: May cause sensitization by skin contact.

Referring specifically to Section II - Turpentine:

R10: Flammable.
R20: Harmful by inhalation.
R21: Harmful in contact with skin.
R22: Harmful if swallowed.
R36: Irritating to eyes.
R38: Irritating to skin.
R43: May cause sensitization by skin contact.
R51: Toxic to aquatic organisms.
R52: Harmful to aquatic organisms.
R53: May cause long-term adverse effects in the aquatic environment.

Safety Phrase(s):

S15: Keep away from heat
S16: Keep away from sources of ignition - No smoking
S22: Do not breathe dust
S24: Avoid contact with skin
S25: Avoid contact with eyes
S36: Wear suitable protective clothing
S37: Wear suitable gloves
S39: Wear eye/face protection
S51: Use only in well-ventilated areas
S3: Keep in a cool place
S7: Keep container tightly closed
S9: Keep container in a well-ventilated place

SECTION XVI. OTHER INFORMATION

Glossary:

ACGIH: American Conference of Governmental Industrial Hygienists
ANSI: American National Standards Institute
ASTM: American Society for Testing and Materials
CAS: Chemical Abstract Services
CFR: Code of Federal Regulations (United States)
CSA: Canadian Standardisation Association
DOT: Department of Transportation (United States)
DSL: Domestic Substances List (Canada)
EPA: Environmental Protection Agency (United States)
HMIS: Hazardous Material Information System
IARC: International Agency for Research on Cancer
LC50: (Lethal concentration₅₀) Concentration of a substance in air that causes death of 50% mortality of a defined animal population
LD50: (Lethal dose₅₀) Single dose of a substance that, when administered by a defined route in an animal assay, is expected to cause the death of 50% of a defined animal population.
NFPA: National Fire Protection Association (United States)
NIOSH: National Institute for Occupational Safety and Health
NTP: National Toxicology Program
OSHA: Occupational Safety & Health Administration (United States)
PEL: Permissible Exposure Limit
RCRA: Resource Conservation and Recovery Act (United States)
RTECS: Registry of Toxic Effects of Chemical Substances
TDG: Transportation of Dangerous Goods
TLV: Threshold Limit Value
TWA: Time-weighted average
TSCA: Toxic Substances Control Act (United States)
WHMIS: Workplace Hazardous Materials Information System (Canada)

Reference:

Supplier MSDS

This MSDS has been prepared by: SOPREMA, INC.
For information: 800-543-3085

The Material Safety Data Sheets of SOPREMA are available on Internet at the following site: [HTTP://WWW.SOPREMA.US](http://WWW.SOPREMA.US)

Justification of the update:

New MSDS.

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

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