



# MATERIAL SAFETY DATA SHEET

## R-NOVA

HMIS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #0056b3; color: white;"><td style="text-align: center;"><b>1</b></td><td style="text-align: center;"><b>HEALTH</b></td></tr> <tr style="background-color: #ff0000; color: white;"><td style="text-align: center;"><b>0</b></td><td style="text-align: center;"><b>FLAMMABILITY</b></td></tr> <tr style="background-color: #ff8c00; color: white;"><td style="text-align: center;"><b>0</b></td><td style="text-align: center;"><b>REACTIVITY</b></td></tr> <tr style="background-color: #cccccc;"><td style="text-align: center;"><b>G</b></td><td style="text-align: center;"><b>PROTECTIVE EQUIPMENT</b></td></tr> </table>	<b>1</b>	<b>HEALTH</b>	<b>0</b>	<b>FLAMMABILITY</b>	<b>0</b>	<b>REACTIVITY</b>	<b>G</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>NOT REGULATED</b>
<b>1</b>	<b>HEALTH</b>									
<b>0</b>	<b>FLAMMABILITY</b>									
<b>0</b>	<b>REACTIVITY</b>									
<b>G</b>	<b>PROTECTIVE EQUIPMENT</b>									

### SECTION II. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Product name:</b>	R-NOVA
<b>Use:</b>	White acrylic roof coating
<b>Manufacturer:</b>	Soprema, USA 310 Quadral Drive Wadsworth, Ohio 44281 UNITED STATES
<b>In case of emergency:</b>	SOPREMA (8:00am to 5:00pm - Eastern time): (800) 356-3521 CHEMTREC (USA) (24h.): (800) 424-9300 International: (703) 527-3887

### EMERGENCY OVERVIEW!!!

**Direct skin and eye contact may cause irritation. Ingestion may cause gastric distress.  
Inhalation may cause irritation to the respiratory tract.**

### SECTION II. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	CAS#	% by weight
Titanium dioxide	13463-67-7	5 - 10
Calcium carbonate	1317-65-7	7 - 13
Silica, quartz	13463-67-7	0.1 - 1
Zinc oxide (as zinc)	1314-13-2	3 - 7
Inert ingredients	n/a	<Balance>

### SECTION III. POTENTIAL HEALTH EFFECTS

#### *Effects of Short-Term (Acute) Exposure*

**INHALATION:**

None expected, however, certain individuals may experience minor nausea or headaches.

**SKIN CONTACT:**

None expected, however, prolonged contact may cause irritation.

**EYE CONTACT:**

May cause eye irritation (burning, tearing, redness or swelling).

**INGESTION:**

May cause liver and kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea.

**CHRONIC/CARCINOGENICITY EFFECTS:**

This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 (Toxicological Information) for more details.

### SECTION IV. FIRST AID MEASURES

SKIN	Remove contaminated clothing and shoes. Wash affected areas with soap and water.
EYES	In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.
INHALATION	Remove the person from the contaminated area to fresh air. If breathing is difficult, give oxygen. Contact a physician if symptoms develop.
INGESTION	Get medical attention immediately. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious victim.

### SECTION V. FIRE-FIGHTING MEASURES

Flash point	> 212 °F
Flash point method	Setaflash
Lower explosive limit	not available
Upper explosive limit	not available
Extinguishing media	Carbon dioxide, water, water fog, dry chemical, chemical foam.
Fire and explosion hazards	Product is not considered flammable or combustible. Products of combustion include compounds of carbon, hydrogen, oxygen, aluminium and zinc, including carbon monoxide.
Fire fighting instructions	Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released. Firefighters should wear self-contained breathing apparatus and full protective gear.

### SECTION VI. ACCIDENTAL RELEASE MEASURES

**RELEASE OR SPILL:**

Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect and dispose in accordance with applicable regulations.

### SECTION VII. HANDLING AND STORAGE

Keep containers tightly closed. Store in a cool, dry, well-ventilated area. Protect from physical damage. Protect from extremetemperatures. Keep out of reach of children.

**SECTION VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>SKIN</b>	Use with chemical-protective gloves to prevent skin contact.
<b>RESPIRATORY</b>	This product is an encapsulated mixture which reduces the likelihood of exposure to hazardous particulates. Airborne exposures to hazardous dusts or mists may be generated by spraying, sanding or grinding. The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge and particulate filter or supplied air respirator. Respirator use may be required due to secondary operations such as mixing, spraying, sanding, buffing, etc.
<b>EYES</b>	Safety glasses with side shields or goggles recommended.
<b>ENGINEERING CONTROLS</b>	Use with adequate general and local exhaust ventilation. When used outdoors, stay well away from building air intakes or close and seal the intakes to prevent product from entering building.
<b>INGREDIENT(S) - EXPOSURE LIMITS</b>	calcium carbonate OSHA PEL-TWA 15 mg/m <sup>3</sup> (total dust) OSHA PEL-TWA 5 mg/m <sup>3</sup> (respirable dust) silica, quartz ACGIH TLV-TWA 0.025 mg/m <sup>3</sup> OSHA PEL-TWA 30mg/m <sup>3</sup> / (%SiO <sub>2</sub> +2) (total dust) OSHA PEL-TWA 10 mg/m <sup>3</sup> / (%SiO <sub>2</sub> +2) (respirable dust) titanium dioxide ACGIH TLV-TWA 10 mg/m <sup>3</sup> (respirable) OSHA PEL-TWA 15 mg/m <sup>3</sup> (total dust) zinc oxide (as zinc) ACGIH TLV-STEL 10 mg/m <sup>3</sup> ACGIH TLV-TWA 2 mg/m <sup>3</sup> OSHA PEL-TWA 5 mg/m <sup>3</sup> OSHA PEL-TWA 15 mg/m <sup>3</sup>

**SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES**

<b>PHYSICAL FORM</b>	Liquid
<b>COLOR</b>	White
<b>ODOR</b>	Paint-like odor
<b>SPECIFIC GRAVITY</b>	1.34
<b>BOILING POINT</b>	212 °F (100 °C)
<b>VAPOR PRESSURE</b>	760 @ 212° F
<b>VAPOR DENSITY</b>	> 1
<b>SOLUBILITY IN WATER</b>	Dispersible
<b>pH FACTOR</b>	> 9.0
<b>EVAPORATION RATE</b>	< 1

## SECTION X. STABILITY AND REACTIVITY

**STABILITY:**

Stable

**INCOMPATIBILITY:**

Strong oxidizers, strong acids

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, aluminum and zinc fumes and smoke may be produced.

**HAZARDOUS POLYMERIZATION:**

Will not occur

**CONDITIONS TO AVOID (STABILITY):**

Extreme temperatures

**CONDITIONS TO AVOID (POLYMERIZATION):**

None

## SECTION XI. TOXICOLOGICAL INFORMATION

**Chronic/Carcinogenicity**

IARC has concluded that the following chemicals in this product are carcinogenic to humans (Group 1): silica, quartz

IARC has concluded that the following chemicals in this product are possibly carcinogenic to humans (Group 2B):

titanium dioxide

ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz

NTP has listed the following chemicals in this product as known human carcinogens: silica, quartz

Risk of cancer depends on duration and level of exposure to this product as a dust or aerosol mist.

**Miscellaneous Toxicological Information**

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

**Ingredient(s) - Toxicological Data**

calcium carbonate

oral-rat LD<sub>50</sub>: 6450 mg/kg

silica, quartz

iv-rat LD<sub>50</sub>: 500 mg/kg bw/Quartz (10-200 um)

zinc oxide (as zinc)

Oral-mouse LD<sub>50</sub>: 7950 mg/kg

Inhal-mouse LC<sub>50</sub>: 2500 mg/m<sup>3</sup>

## SECTION XII. ECOLOGICAL INFORMATION

**Ecotoxicological Information**

Data not available for this mixture.

**Acute Toxicity - Fish And Invertebrates**

Titanium dioxide:

96-hour LC50, fathead minnows: >1000 mg/L

**Toxicity - Aquatic And Terrestrial Plants**

Data not available for this mixture or the components within.

**Acute And Dietary Toxicity - Birds**

Data not available for this mixture or the components within.

**Toxicity - Beneficial Microorganisms**

Data not available for this mixture or the components within.

**Environmental Fate Information**

Data not available for this mixture or the components within.

### SECTION XIII. DISPOSAL CONSIDERATIONS

Incinerate or dispose of in accordance with Federal, State or Local regulations.

### SECTION XIV. TRANSPORTATION INFORMATION

**GROUND** - Not restricted

**IMDG** - Not restricted

**IATA** - Not restricted

### SECTION XV. REGULATORY INFORMATION

#### SARA Hazard Classes

Acute Health Hazard

#### Ingredient(s) - U.S. Regulatory Information

zinc oxide (as zinc)

SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

#### Ingredient(s) - State Regulations

*calcium carbonate*

Pennsylvania - Workplace Hazard

*silica, quartz*

New Jersey - Workplace Hazard

Pennsylvania - Workplace Hazard

California - Proposition 65

Massachusetts - Hazardous Substance

*titanium dioxide*

New Jersey - Workplace Hazard

Pennsylvania - Workplace Hazard

New York City - Hazardous Substance

*zinc oxide (as zinc)*

New Jersey - Workplace Hazard

New Jersey - Environmental Hazard

Pennsylvania - Workplace Hazard

Pennsylvania - Environmental Hazard

#### Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: D2A - Very Toxic

#### Ingredient(s) - Canadian Regulatory Information

*silica, quartz*

WHMIS - Ingredient Disclosure List

*zinc oxide (as zinc)*

WHMIS - Ingredient Disclosure List

### 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

## SECTION XVI. OTHER INFORMATION

### Glossary:

LC50: (Lethal concentration<sub>50</sub>) Concentration of a substance in air that causes death of 50% mortality of a defined animal population

LD50: (Lethal dose<sub>50</sub>) 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.

**To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier or any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**