

**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

**Product Name:** roVa™ Flex Plus

**Synonyms:** Silica aerogel material

**Use of the Substance/Preparation:** High performance insulation material

**Manufacturer:** roVa Corporation

**Address:** 382, Gangnam-daero, Gangnam-gu, Seoul, Korea - 06232

**Telephone:** +82 2 796 8440

**Fax:** +82 31 221 9822

**2. HAZARDS IDENTIFICATION**

**Indication of Hazards to Humans and the Environment:**  
Not hazardous according to the Globally Harmonized System (GHS)

**Emergency Overview**

**Appearance:** White Solid  
**Odor:** Slight Acrylate Odor

**Primary Routes of Exposure:**  
Primary routes of exposure for liquids include skin and eye contact, inhalation, and ingestion.

**Potential Health Effects**

**Skin contact:**  
No health effects are expected.

**Eye contact:**  
No health effects are expected.

**Inhalation:**  
This product may have a characteristic odor; however, no adverse health effects are anticipated.

**Ingestion:**  
No health effects are expected.

**Chronic Effects of Exposure:**  
None known for product

**Carcinogenicity:**  
Not applicable

**Target Organ Effects:**  
Not applicable

**Medical Condition Aggravated By Exposure:**

Excessive exposure and inhalation may aggravate pre-existing skin disorders and chronic respiratory disorders including, but not limited to, bronchitis, emphysema, and asthma.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent	EINECS Number
Trimethylsilylated Silica (amorphous silica)	7631-86-9	5~10	262-373-8
Acrylate Copolymer	25085-02-3	75~80	
Water	7732-18-5	1~10	231-791-2
Proprietary Additive	NA	<=5	Not assigned

### 4. FIRST AID MEASURES

**Eye Contact:**

No need for first aid is anticipated.

**Skin Contact:**

No need for first aid is anticipated

**Ingestion:**

No need for first aid is anticipated

**Inhalation:**

No need for first aid is anticipated

### 5. FIRE-FIGHTING MEASURES

**Flash Point:**

Not applicable

**Autoignition Temperature:**

Not applicable

**Hazardous combustion products:**

Carbon dioxide, carbon monoxide, hydrocarbons

**Extinguishing Media:**

Use media suitable for surrounding fire and that are appropriate to the surrounding environment; Water & foam, water mist, carbon dioxide, and dry chemical fire extinguishers are all suitable. Note that water & foam and water mist fire extinguishers are primarily for Class A fires.

**Protective Equipment for Fire-fighting:**

Firefighters should be equipped with self-contained breathing apparatus and turnout gear.

**Unusual Fire and Explosion Hazards:**

No unusual fire or explosion hazards are anticipated.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**

Not applicable.

**Environmental procedures:**

Not applicable.

**Clean-up methods:**

Not applicable.

**7. HANDLING AND STORAGE****Precautions for Safe Handling:**

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions

**Conditions for Safe Storage:**

Avoid high temperature and protect from freezing.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Occupational Exposure Limits**

Not applicable

**Engineering Controls**

Not applicable

**Personal Protective Equipment****Respiratory Protection:**

Under normal use conditions, airborne exposure are not expected to be significant enough to require respiratory protection.

**Hand Protection:**

Gloves not normally required. Avoid prolonged or repeated skin contact.

**Eye Protection:**

Avoid eye contact.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	White Solid
<b>Odor:</b>	Slight Acrylate Odor
<b>pH:</b>	Not applicable
<b>Freezing/Melting Point:</b>	Not applicable
<b>Boiling Point:</b>	Not applicable
<b>Flashing Point:</b>	Not applicable
<b>Evaporation Rate:</b>	Not applicable
<b>Flammability:</b>	Not applicable

**Vapor Pressure:** Not applicable  
**Solubility in Water:** Not applicable  
**Autoignition Temperature:** Not applicable  
**Viscosity:** Not applicable

## 10. STABILITY AND REACTIVITY

**Chemical Stability:**

stable

**Hazardous Reactions:**

Under recommended usage conditions, hazards decomposition products are not expected.

**Conditions To Avoid:**

Prolonged exposure to temperatures above the recommended use temperature.

**Substances to Avoid:**

strong acids and strong bases

**Hazardous Decomposition Products:**

Under recommended usage conditions, Hazardous decomposition products are not expected. By-Products may occur as a result of during Combustion.  
carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), hydrocarbons

## 11. TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## 12. ECOLOGICAL INFORMATION

Ecotoxicological information

Not applicable

Chemical fate information

Not applicable

The completed reaction mass is polymerized and crosslinked.

Therefore, no environmental problems can be generated under normal conditions.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal:**

Waste disposal method: Reclaim if feasible. If product can't be reclaimed, dispose of waster product in a sanitary landfill. Alternatively, incinerate the waste product in an industrial, commercial, or municipal incinerator. Since regulations vary, consult applicable regulations or authorities before disposal.



# Material Safety Data Sheet

roVa™ Flex

Revision Date : 08/16/2018

## 14. TRANSPORT INFORMATION

Not regulated per U.S. DOT, IATA or IMO.

## 15. REGULATORY INFORMATION

This product contains Styrene Acrylic Latex Polymer NJTS-50078-NCD.

Styrene Acrylic Latex Polymer NJTS-50078-NCD:

### U.S. Federal Regulations

<b>Registration Status</b>	TSCA, US released/listed
<b>OSHA Hazard Category</b>	Not Hazardous
<b>CERCLA Hazard Category</b>	Not Hazardous
<b>SARA Hazard Category (EPCRA 311/312)</b>	Not Hazardous

### U.S. State Regulations

**Right-to-Know Substances List** NJ, PA, MA

### **California Proposition 65:**

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

## 16. OTHER INFORMATION

### **HMIS Rating**

Health: 0 Flammability: 0 Physical Hazard: 0

## DISCLAIMER

The Data set forth in these sheets are based on the information provided by the suppliers of the raw materials and chemicals used in the manufacturing of the aforementioned product. roVa corporation makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereon.

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