

## MATERIAL SAFETY DATA SHEET INNOWAX 272

<b>1. Chemical Product Identification and Manufacturer Information</b>	
Brand name	INNOWAX 272 oxidized Polyethylene Wax
Technical name	Low-molecular homopolymer
Manufacturer	INNOVATIVE CHEMICAL TECHNOLOGIES Ltd.
Address	446209, Samara Region, Novokuibyshevsk City, Polevaya street, building 1
E-mail	<a href="mailto:info@inhimtek.ru">info@inhimtek.ru</a>
Phone	+7 (846) 201 23 17
<b>2. Chemical Composition (Component Information)</b>	
Chemical name	Low-molecular polyethylene
Chemical formula	$(C_xH_{2x})_n(COOH)_y$
CAS number	9002-88-4
Assay	100%
<b>3. Potential Dangers</b>	
Hazard class	IV according to GOST 12.1.007-76
Health effects	Does not have any acute or chronic exposure. Dust inhalation can cause reactive airway disease. Causes thermal burn when melted. Biologically inert.
Environmental hazards	Environmentally-friendly. In the environment acts as a non-indigenous long-term decomposition element
Other information	Low-flammable, evolves CO <sub>2</sub> and irritants while burning. The product is subject to electrostatic charging.
<b>4. First Aid Measures</b>	
General conditions	Special measures are not required.
Symptoms	Slightly-toxic, poisoning symptoms do not develop
After inhalation	Take the person outside
After eye contact	Wash with water, remove as any other mechanical impurity
After skin contact	No reaction. Can cause thermal burn when melted.
<b>5. Fire Extinguishing Measures</b>	
Fire extinguishers to be used	Small fire – dry powder, carbon dioxide or foam fire extinguishers. Big fire – water spray, water mist or foam.
Not to be used	Head water streamflow
Special considerations in case of fire	Burning evolves irritant gases and heavy smoke
Special explosion hazard	Dust particles production can be caused during manufacturing. If they gather in large quantities, there can be a big explosion caused by an open fire. Therefore, these places should be provided with exhaust ventilation excluding open fire. Static electricity neutralization from equipment should be provided.
Firemen protection	Protective gear, breathing apparatus

<b>6. Emergency Measures (Accidental Emission)</b>	
Personal safety, protection gear, emergency measures	Spilt product can cause slipping and falling. Avoid dusted places.
Prevention measures	Do not drain spilt product.
Interception and treatment methods and material	Spilt product should be swept and collected in a separate container. Recycle or recover the product according to contamination.
<b>7. Treatment and Storage</b>	
Safe treatment	Follow all the fire-prevention measures (do not work with open fire, remove potential ignition sources, prohibit smoking). Prevent dust production and static voltage.
Safe storage conditions	No special safe storage conditions are required.
<b>8. Restrictions and Sampling Inspection. Individual Protection</b>	
Exposure limit values	Safe dust concentration limit in occupational air is 5mg/m <sup>3</sup>
Exposure control	Recommended method of dust concentration evaluation: gravimetric analysis, dust meter
Occupational exposure control	Collective protection: proper ventilation Individual protection: protective eyewear, respirator, work wear, protective gloves
<b>9. Physical and Chemical Properties</b>	
Basic physical and chemical properties information	Physical state at 20°C – solid substance Colour - white Smell – typically paraffin Degree of flammability –flammable Density at 25°C – 0.92-0.95 g/cm <sup>3</sup> Water solubility at 20°C - insoluble Solubility in aliphatic, aromatic solvents and chlorinated hydrocarbons at 20°C - soluble Melting point - 105-124°C Flash point - 380-390°C Dust burning point - 350°C Combustion value – 46-47 MJ/kg <sup>-1</sup> Bulk weight – 500-550 kg/m <sup>3</sup>
<b>10. Persistence and reactive power</b>	
Conditions to be avoided	The substance at room temperature is persistent. Avoid temperature over 300°C, ignition sources, static electricity.
Decomposition products	At high temperatures CO, CO <sub>2</sub> and H <sub>2</sub> O is produced in the air
<b>11. Toxicological Information</b>	
Acute effects	According to up-to-date information the product is not harmful for people and does not affect people's health. Long inhalation of decomposition products can cause headache and respiratory irritation.
Sensibility	Does not have any sensitizing effect.
Carcinogenicity, mutagenicity, carcinogenicity	No proved CMR affect
<b>12. Ecology Data</b>	
Ecotoxicity	The product is considered environmentally-friendly.

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Duration/decomposition	In the environment acts as a non-indigenous long-term decomposition element. It is decomposed under ultraviolet radiation, is not soluble in water.
<b>13. Decontamination Measures</b>	
Recommended decontamination and prevention measures	Avoid draining, recover mechanically. Reuse the product as a fuel.
<b>14. Transportation Information</b>	
Transportation class	The product is not dangerous. Transportation without any restrictions.
<b>15. National and International Law Information</b>	
Safety, health and environmental regulations / special legal regulations	Not available
Product marking	Not required (the product is not referred to as 'dangerous')
<b>16. Other information</b>	
The material safety data sheet is developed according to GOST 30333-2007. It contains data required to provide safety and health protection at work and to provide environment protection. These data do not substitute for a quality data sheet and cannot be considered warranty of the product fitness for a particular purpose. The customer bears responsibility for the compliance of the existing local legal regulations.	