



KUMAR ORGANIC PRODUCTS LIMITED

Safety Data Sheet : Kopulan

1. Identification of the substance/Mixture and of the company/undertaking

Product identifier	Pullulan
Brand Name	Kopulan
Synonym	PULLULAN
Molecular formula	$(C_{18}H_{30}O_{15})_n$
Product Code	K050
Recommended use Restrictions on use	For manufacturing substances Industrial use only
Details of the Supplier	Kumar Organic Products Limited PLOT NO: 94P, 103 & 104, Pharma Sez, KIADB industrial area, H.N.pura road, Hassan- 573 201, India Ph: 08172 243091 / 92 Email: kop@kumarorganic.net

2. Hazards Identification

Classification of the substance

Not a hazardous substance according to regulation (EC) No. 1272/2008 [CLP/GHS]

This substance is not classified as dangerous according to Directive 67/548/EEC [DSD]

Other hazards None to our knowledge

3. Composition/Information on ingredients

Name	CAS Number	GHS Hazard Class & Categ.Code	EU Directive 67/548/EEC Classification	Percent (w/w) approx.
Pullulan	9057-02-7	Not Classified	Not Classified	≤ 100%

4. First Aid Measures

Description of first aid measures

Eye contact	Flush eyes with water.
Inhalation	Move to fresh air.
Skin contact	Wash thoroughly with water



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Ingestion	Rinse mouth with water. If Pullulan is swallowed in large amounts obtain medical attention.
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5. Fire Fighting Measures

Extinguishing media	Use water spray, foam, dry chemical or carbon dioxide
Special hazards arising from the substance or mixture	Decomposition products are not known
Advice to firefighters	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes for fire-fighting.


6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust.
Environmental precautions	Prevent product from entering drains (see section 12 – ecological information).
Methods and material for containment and cleaning up	Take up mechanically or sweep up carefully and transfer to a suitable container for recovery or waste disposal (see section 13 disposal consideration). Avoid generation of dust. Wash spill site after material pick-up is complete. Disposal of waste in accordance with local regulatory requirements for non-hazardous waste.

7. Handling and Storage

Precautions for safe handling	Ensure adequate ventilation. Do not get into eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.
Conditions for safe storage	Keep container tightly closed in a dry and well ventilated place.

8. Exposure Controls and Personal Protection

Exposure controls	Ensure good industrial hygiene and safety practice.
Occupational exposure controls	Wear recommended personal protective equipment as details below:
Personal protection	
Respiratory protection	Respiratory protection would not be required, generally. Where dust levels / airborne concentrations are high use dust-masks. Use respirators and components tested and approved under appropriate government standards - Seek professional advice prior to respirator selection.
Hand protection	Wear chemical protective gloves
Eye protection	Wear safety glasses 



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Skin protection	Wear chemically protective clothing
Work practices	Eye wash facilities and a safety shower should be easily accessible. Before breaks and at the end of work thoroughly wash hands with soap and water. Wash contaminated clothing before use. Clean footwear before use.
Environmental exposure controls	Do not let the product enter drains. Refer to Local, State or National Legislations for environment and pollution control.

9. Physical and Chemical Properties

Appearance	White powder
Odour	Characteristic
Odour threshold	No data available
pH	4.5 – 6.5
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	Not available
Solubility(ies)	Freely Soluble in Water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

10. Stability and Reactivity

Reactivity	No specific test data related to reactivity available for this product
Chemical stability	Stable under recommended storage conditions
Possibility of hazardous reactions	No data available
Conditions to avoid	Avoid dust formation, accumulation of airborne dusts and Incompatible products
Incompatible materials	Strong Oxidizing agents.
Hazardous decomposition products	No data available.



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11. Toxicological Information

Acute toxicity	LD50 oral (Mice) >14 g/kg
Skin corrosion/Irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Reproductive toxicity	No data available
Specific target organ toxicity – single exposure	No data available
Specific target organ toxicity – repeated exposure	No data available

12. Ecological Information

Toxicity	No data available
Persistence and degradability	Readily biodegradable
Bioaccumulative potential	No data available
Mobility in soil	Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil
Results of PBT and vPvB assessment	Not known
Other adverse effects	Not known

13. Disposal Considerations

Product and Contaminated packaging	Waste must be disposed off in accordance with local environmental control regulations
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14. Transport Information

Not classified as dangerous for transport in accordance with CDG, IMDG, ADR, RID, ICAO/IATA

15. Regulatory Information

Classification in accordance with UN GHS/EU Regulation EC 1272/2008: Not a hazardous substance

16. Other Information

Prepared on: 10.11.2015

Issued on : 13.11.2015



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The information contained in the safety data sheet (SDS) has been compiled from data considered to be accurate. This data is believed to be reliable, however it must be pointed out that values for certain properties are known to vary from source to source. This data is not to be construed as absolutely complete since additional data may be desirable when particular conditions or circumstances exist. It is the responsibility of the user to determine the best precautions necessary for the safe handling and use of this product for his applications. This data relates only to the specific material designated and not to be used in combination with any other material. Many federal and state regulations pertain directly or indirectly to the product end use and disposal of containers and unused material. It is the purchaser's responsibility to familiarize themselves with all applicable regulations. Kumar Organic Products Ltd makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances nor assumes any liabilities from the use of its products or information provided herein.