

TUBALL MATRIX 620
 TUBALL MATRIX 620.1 beta
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 TUBALL MATRIX 620.4 beta

Version 1.0
 Issue date: 17/06/2022
 Revision date: 17/06/2022

SDS Record Number: CSSS-TCO-010-151556

Section 1 Chemical Product and Company Identification

Chemical name: TUBALL MATRIX 620
 TUBALL MATRIX 620.1 beta
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Additional identification: Not available

Product code: Not available

Identification of the product: See section 3

Relevant identified uses of the substance and uses advised against

Identified uses: Industrial use as additive in polymers, resins and/or coatings.

Uses advised against: Not available

Details of the supplier of the safety data sheet

	Europe:	USA:	Asia:	China:	India:
Name:	OCSiAl Europe S.a.r.l.	OCSiAl LLC	OCSiAl Asia Pacific Co., Ltd.	OCSiAl Hong Kong Limited	VIMAL INTERTRADE PVT LTD.
Address:	L-3364, Leudelange, 1, rue de la Poudrerie, Grand Duchy of Luxembourg	950 Taylor Station Road Suite W Gahanna, OH 43230	Office 208, Pilot Plant Bldg., Incheon Technopark 12 Gaetbeol-ro, Yeonsu- gu, Incheon, 406-840 Republic of Korea	No. 1102, 11/F, Lippo Sun Plaza, 28 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong	Shivam Centrum, Sahar Road, Koldongri, Above Nexa Showroom, Andheri East, Mumbai – 400 069
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Section 2 Hazards Identification

Emergency Overview: Black Viscous Paste. Decomposition will produce carbon monoxide and carbon dioxide. Causes serious eye irritation.

GHS Classification:

GHS Classification:

Physical hazards	Not classified	
Health hazards	Serious eye damage/eye irritation	Category 2A
Environmental hazards	Not classified	

Label elements

Safety Data Sheet

According to GB/T 16483-2008 and GB/T 17519-2013

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Pictogram:



Signal Word(s): Warning

Hazard Statement: Causes serious eye irritation.

Precautionary statement

Prevention: Wash hands thoroughly after handling.
 Wear eye protection/face protection.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists: Get medical advice/attention.

Storage: Not applicable.

Disposal: Not applicable.

Physical and chemical hazards: Decomposition will produce carbon monoxide and carbon dioxide.

Health Hazards: Causes serious eye irritation.

Environmental hazards: Based on all known information, this product does not affect the environment.

Other hazards: This product has not been found to have other hazards which are outside the scope of GB30000.2-29.

Section 3 Composition Information on Ingredients

Substance/Mixture/Article: Mixture

Ingredient(s):

Chemical Name	CAS No.	Concentration (%)
Distillates (petroleum), solvent refined heavy paraffinic	64741-88-4	76.26 – 85.5%
Polymer	Trade secret	9.5 – 16.74%
Single wall carbon nanotubes	N/A	5 – 10%

Undisclosed ingredients include: 1) non-hazard ingredients, and 2) ingredients which are below the cut-off value required by Section 3.3 of GB / T 17519.

Section 4 First Aid Measures

In case of inhalation: Remove person to fresh air and keep comfortable for breathing.

In case of skin contact: Wash with plenty of soap and water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

In case of eyes contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

In case of ingestion: Call a poison center or a doctor if you feel unwell.

Most important symptoms and effects, both acute and delayed: May cause irritation to the respiratory tract. Skin contact may cause moderate irritation, including burning sensation, tearing, redness or swelling. Causes

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To protect playing rescuer advice and the special hints to the doctor:	serious eye irritation.
Indication of any immediate medical attention and special treatment needed:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Provide general supportive measures and treat symptomatically. In the event of shortness of breath, give oxygen. Keep the victim warm. Observe the patient. Symptoms may delay.

Section 5 Fire-fighting Measures

Extinguishing agent

Suitable extinguishing media: Carbon dioxide (CO₂). Dry powder. Foam.

Unsuitable extinguishing media: Not available.

Special hazards:

Decomposition will produce carbon monoxide and carbon dioxide.

Special fire fighting methods and special protective actions for fire-fighters:

Firefighters should wear self-contained breathing apparatus, and wear full body fire service and extinguish fire in the windward direction. Remove the container from the fire to empty place as far as possible. Isolate the accident area, prohibit access to unrelated persons. Contain and handle fire water to prevent environmental pollution.

Section 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Wear suitable protective clothing. Evacuate area. Ventilate spillage area. Do not attempt to take action without suitable protective equipment. Provide adequate ventilation. Avoid inhalation of vapors.

Environmental precautions:

Do not allow to enter into surface water or drains. Collect contaminated extinguishing water separately and must not enter the sewage system.

Methods and materials for containment and cleaning up:

Clean spills promptly. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area. Stop leak if safe to do so. Collect in closed container and remove to a safe place for disposal by burning. Absorb remaining liquid with sand or inert absorbent and remove to safe place. Clean spills promptly.

Precautions to prevent the occurrence of secondary hazards:

Clean up spills immediately to prevent leaks again.

Section 7 Handling and Storage

Safe handling

Local and general ventilation: Provide adequate ventilation.

Safety instructions: Operators should follow the procedure and use the personal protective equipment recommended by the SDS section 8.

Precautions: Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection.

Storage

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Suitable storage conditions:	Store in a well-ventilated place. Keep cool. Protect from sunlight. Storage temperature: -35 / +40 °C. Keep away from open flames, hot surfaces and sources of ignition. Keep container tightly closed.
Incompatible materials:	Strong oxidizing agents.
Safe packaging materials:	Keep it in the original container.

Section 8 Exposure Controls / Personal Protection

Occupational exposure limits:	According to GBZ2.1, the OELs of components are not established.
Biological limits:	No standard has been established.
Engineering controls:	Ensure adequate ventilation. Make sure the workplace is equipped with a safe place to shower, clean eyes and body, and place for safe care.
Personal protection equipment	
Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment. Device: Gas filters. Filter type: Type A-P2. Condition: If conc. in air > exposure limit.
Hand protection:	Chemically resistant protective gloves.
Eye protection:	Safety glasses with side shields.
Skin and body protection:	Wear suitable protective clothing.
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9 Physical and Chemical Properties

Appearance:	Black Viscous Paste.
Odor:	No data available
Odor threshold:	No data available
Molecular formula:	Not applicable
Molecular weight:	Not applicable
Melting point/freezing point (°C):	No data available
Boiling point, initial boiling point (°C):	No data available
Density:	No data available
Relative density(H₂O=1):	No data available
Vapor pressure (20°C) (kPa):	No data available
Partition coefficient (n-octanol/water):	No data available
Solubility in water:	No data available
Solubility in organic solvents:	No data available
Flash point (°C):	No data available
Auto-ignition temperature (°C):	No data available
Flammability limit - lower (%):	No data available
Flammability limit - upper (%):	No data available
Decomposition temperature (°C):	No data available

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Flammability (solid, gas):	Non flammable.
Explosive properties	No data available
Oxidising properties	Non oxidizing.
Explosive limit - lower (%):	No data available
Explosive limit - upper (%):	No data available
pH value:	No data available
Viscosity (mPa · S):	No data available
Relative vapor density (air=1):	No data available
Relative evaporation rate (n-butyl acetate=1):	No data available

Section 10 Stability and Reactivity

Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No dangerous reaction known under conditions of normal use.
Conditions to avoid:	Incompatible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon dioxide. Carbon monoxide.

Section 11 Toxicological Information

Acute toxicity	
Distillates (petroleum), solvent refined heavy paraffinic (CAS#64741-88-4)	
LD50(Oral, Rat):	> 5000 mg/kg bw
LD50(Dermal, Rat):	> 5000 mg/kg bw
LC50(Inhalation, Rat):	> 5.53 mg/L 4 h
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Causes serious eye irritation.
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
Reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

Section 12 Ecological Information

Ecotoxicity	
Distillates (petroleum), solvent refined heavy paraffinic (CAS#64741-88-4)	
LL50 (Fish, 96h)	> 100 mg/L
EL50 (Daphnia, 48h)	> 10000 mg/L
EC50 (Algae, 72h):	Not available

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Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available

Section 13 Disposal Considerations

Residual waste Recycling as much as possible. If recycling is not possible, use incineration methods for disposal. Do not dispose of this product by means of discharge to the sewer.

Contaminated packaging Empty containers or pads may retain some product residue, so beware of label warnings even when empty containers. These materials and their containers must be disposed of in a safe manner. Empty containers should be returned to the manufacturer or sent to a national / local approved waste disposal site.

Local disposal regulations Waste disposal should refer to the relevant national and local laws and regulations, the waste chemicals for recycling, or packed in sealed containers, to a special waste disposal sites.

Section 14 Transport Information

UN Number: Not regulated

UN Proper shipping name: Not regulated

Transport hazard Class: Not regulated

Packaging group: Not regulated

Marine pollutant (yes/no): No

Transport special precautions:

- Grounding chains should be equipped with tank or car during transportation, hole plate can be set in the tank to prevent static electricity generated by shaking;
- Exhaust pipe of the vehicle which transports this product shall be equipped with fireproofing equipment, Do not handle with the machinery or tools which may produce spark easily;
- Do not package or transport with oxidant, food chemicals or others;
- Prevent from sunlight exposure, rain and heat during transportation, in summer, best to transport in the morning or evening;
- Keep away from fire, heat source and high temperature when stops on the way;
- Follow the route as prescribed during highway transportation, do not stay in residential areas and densely populated area;
- Prohibit humping in railway transportation;
- Transport vehicles should be equipped with corresponding fire equipment and spill contingency processing equipment.

15.Regulatory Information

The following laws, regulations, rules and standards, provide corresponding provisions of the management of chemicals:

Name	Relevant Inventories	Listed Or Not
Measures On Safety Management Of Hazardous Chemicals	Inventory Of Hazardous Chemicals	Not listed
	The First Batch Of Key Regulatory List Of	Not listed

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	Hazardous Chemicals	
Measures On New Substance Environmental Management	The Inventory Of Existing Chemical Substance In China	Single walled carbon nanotubes are listed with its element "Carbon" (CAS-No: 7440-44-0)
Provisions On Environmental Management Of First Import And Export Of Toxic Chemicals	China Strictly Restricted List Of Import And Export Of Toxic Chemicals	Not listed

Section 16 Other Information

Indication of changes:

Version 1.0 Amended by GB/T16483 and GB/T 17519.

Abbreviations:

CAS: Chemical Abstracts Service

LC50: Lethal Concentration 50

EC50: Concentration for 50% of maximal effect

LD50: Lethal dose 50%

PC-TWA: time-weighted average allowable concentration, average allowable concentration in 8h working day, 40h work week.

PC-STEL: Short-Term Exposure Tolerance, the concentration allowed to be exposed in short-term (15 minutes).

IARC: International Agency for Research on Cancer

ACGIH: US Government Conference of Industrial Hygienists

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Dangerous Goods

EINECS: European Inventory of Existing commercial Chemical Substances

IATA: International Air Transport Association

ICAO-TI: International Civil Aviation Organization The International Civil Aviation Covenant

Disclaimer:

Revision: All recent revision(s) are noted by a bold triangle pointed to right '►'.

Disclaimer: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

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