according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PTC105L MICROMAX™ CARBON PASTE

Product code : 00000000027048075

Manufacturer or supplier's details

Company : Celanese (Shanghai) International Trading Co., Ltd

Address : 4560 Jinke Road, Zhangjiang, Pudong

Shanghai, China 201210

Telephone : 86-21-38619288

Emergency telephone number: CHEMTREC International phone number: +1-703-527 3887,

+86 532 8388-9090 (China, 24h)

E-mail address : HazCom@celanese.com

Recommended use of the chemical and restrictions on use

Recommended use : For industrial use only.

Paste for electronic industry

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance : viscous liquid
Colour : black
Odour : aromatic

Combustible liquid. Harmful if swallowed.

GHS Classification

Flammable liquids : Category 4

Acute toxicity (Oral) : Category 4

GHS label elements

Hazard pictograms :

!>

Signal word : Warning

Hazard statements : H227 Combustible liquid.

H302 Harmful if swallowed.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

and other ignition sources. No smoking. P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Physical and chemical hazards

Combustible liquid.

Health hazards

Harmful if swallowed.

Environmental hazards

Not classified based on available information.

Other hazards which do not result in classification

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)	
1,1,3,3-Tetramethylurea	632-22-4	50 -60	
Glass, oxide, chemicals	65997-17-3	20 -30	
Carbon black	1333-86-4	1 -10	

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

If inhaled : If inhaled, remove to fresh air.

If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Get medical attention.

In case of skin contact : Wash off with soap and water.

Get medical attention if irritation develops and persists.

Wash contaminated clothing before re-use.

In case of eye contact : Immediately flush eyes for at least 15 minutes. Get medical

attention.

If swallowed : If swallowed

Rinse mouth with water.

Harmful if swallowed.

Call a physician or poison control centre immediately.

DO NOT induce vomiting unless directed to do so by a physi-

cian or poison control center.

Most important symptoms and effects, both acute and

delayed

5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Dry sand Dry chemical

Alcohol-resistant foam

Specific hazards during fire-

fighting

Hazardous decomposition products formed under fire condi-

tions.

(see also section 10)

Avoid breathing decomposition products.

Specific extinguishing meth-

ods

Evacuate personnel to safe areas.

Stop spill/release if it can be done with minimal risk.

Do not allow run-off from fire fighting to enter drains or water

courses.

Special protective equipment :

for firefighters

Exposure to decomposition products may be a hazard to

health.

Wear self-contained breathing apparatus for firefighting if nec-

essary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation.

Wear suitable protective equipment.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

Clean contaminated floors and objects thoroughly while ob-

serving environmental regulations.

Methods and materials for

containment and cleaning up

Contain spill.

Soak up with inert absorbent material.

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Collect and contain contaminated absorbent and dike material

for disposal.

Keep in suitable, closed containers for disposal.

Ventilate the area.

Clean contaminated surface thoroughly.

Prevention of secondary

hazards

Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

Advice on protection against

fire and explosion

Avoid formation of dust and aerosols.

Keep away from heat and sources of ignition.

Advice on safe handling : Avoid inhalation, ingestion and contact with skin and eyes.

Use only with adequate ventilation/personal protection.

Keep container closed when not in use.

Take care to avoid waste and spillage when weighing, loading

and mixing the product.

Avoidance of contact : Acids

Oxidizing agents

Storage

Conditions for safe storage : Store in original container.

Keep containers tightly closed in a dry, cool and well-

ventilated place.

Keep away from sources of ignition - No smoking. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

Keep container closed when not in use.

Do not reuse empty container.

Further information on stor-

age stability

Stable under normal conditions.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
Glass, oxide, chemicals	65997-17-3	TWA (fibres)	1 fibres per cubic centimeter	ACGIH	
		TWA (Inhal-	5 mg/m3	ACGIH	
		able particu-			
		late matter)			
Carbon black	1333-86-4	PC-TWA	4 mg/m3	CN OEL	
		(Total dust)			
	Further information: G2B - Possibly carcinogenic to humans				
		TWA (Inhal-	3 mg/m3	ACGIH	
		able particu-			
		late matter)			

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Engineering measures : Local exhaust or a laboratory hood should be used when

handling the materials.

Maintain air concentrations below occupational exposure

standards.

Personal protective equipment

Respiratory protection : Provide adequate ventilation.

No personal respiratory protective equipment normally re-

quired.

Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with

dust/mist cartridge.

When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer. Persons performing maintenance or repairs on exhaust system equipment (e.g. ducts) may need to use respirators and protective clothing to prevent exposure to any accumulated

residues.

Eye/face protection : Wear safety glasses with side shields.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Lightweight protective clothing

Safety shoes

Hand protection

Material : Impervious gloves

Remarks : Gloves must be inspected prior to use. Gloves should be

discarded and replaced if there is any indication of degradation or chemical breakthrough. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of

cuts, abrasion, and the contact time.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

Avoid contact with skin, eyes and clothing.

Contaminated work clothing should not be allowed out of the

workplace.

Remove contaminated clothing and protective equipment

before entering eating areas.

Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : viscous liquid

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Colour : black

Odour : aromatic

pH : Substance/mixture is non-polar/aprotic.

Flash point : 80 °C

Method: closed cup

Density : 1.35 g/cm³ (20 °C)

Solubility(ies)

Water solubility : insoluble

10. STABILITY AND REACTIVITY

Chemical stability : The product is chemically stable under recommended condi-

tions of storage, use and temperature.

Possibility of hazardous reac-

tions

No applicable data available.

Conditions to avoid : To avoid thermal decomposition, do not overheat.

Incompatible materials : Acids

Hazardous decomposition

products

Oxidizing agents

No decomposition if stored and applied as directed.

Hazardous thermal decomposition products may include: Carbon monoxide, carbon dioxide and unburned hydrocar-

bons (smoke).

Fluorinated compounds Hydrogen fluoride

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate: 1,493 mg/kg

Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Components:

1,1,3,3-Tetramethylurea:

Acute oral toxicity : LD50 (Rat): 794 mg/kg

Remarks: central nervous system effects

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Acute dermal toxicity : LD50 (Rabbit): 3,160 mg/kg

Carbon black:

Acute oral toxicity : LD50 (Rat): > 8,000 mg/kg

Method: OECD Test Guideline 401

Skin corrosion/irritation

Not classified due to lack of data.

Components:

Glass, oxide, chemicals:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404
Result : Slight or no skin irritation

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

Carbon black:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

Serious eye damage/eye irritation

Not classified due to lack of data.

Components:

Glass, oxide, chemicals:

Species : Not tested on animals
Result : Slight or no eye irritation

Assessment : No eye irritation

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

Carbon black:

Species : Rabbit

Result : No eye irritation Assessment : No eye irritation

Method : OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation

Not classified due to lack of data.

Respiratory sensitisation

Not classified due to lack of data.

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Components:

Glass, oxide, chemicals:

Species : Not tested on animals

Assessment : Does not cause skin sensitisation.
Result : Does not cause skin sensitisation.

Carbon black:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

Species : Mouse

Assessment : Does not cause respiratory sensitisation. Result : Does not cause respiratory sensitisation.

Germ cell mutagenicity

Not classified due to lack of data.

Components:

Glass, oxide, chemicals:

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen., Overall weight of evidence indicates that the

substance is not mutagenic.

Carbon black:

Germ cell mutagenicity -

Assessment

Animal testing did not show any mutagenic effects., Tests on

bacterial or mammalian cell cultures did not show mutagenic

effects.

Carcinogenicity

Not classified due to lack of data.

Components:

Carbon black:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen., Overall weight of

evidence indicates that the substance is not carcinogenic.

Reproductive toxicity

Not classified due to lack of data.

Components:

Carbon black:

Reproductive toxicity - As-

sessment

No toxicity to reproduction, Animal testing showed no repro-

ductive toxicity., Information given is based on data obtained

from similar substances.

Animal testing showed no developmental toxicity., Information given is based on data obtained from similar substances.

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

STOT - single exposure

Not classified due to lack of data.

STOT - repeated exposure

Not classified due to lack of data.

Components:

Glass, oxide, chemicals:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Carbon black:

Exposure routes : Inhalation

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Glass, oxide, chemicals:

Species : Rat
Application Route : Inhalation
Exposure time : 3 Months

Remarks : No toxicological effects warranting significant target organ

toxicity classification were seen below the recommended

guidance values for classification.

Carbon black:

Species : multiple species
Application Route : Inhalation
Test atmosphere : dust/mist

Exposure time : 13 Weeks

Remarks : No toxicologically significant effects were found.

Aspiration toxicity

Not classified due to lack of data.

Components:

Glass, oxide, chemicals:

No aspiration toxicity classification

Carbon black:

No aspiration toxicity classification

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

1,1,3,3-Tetramethylurea:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic effects cannot be excluded

Glass, oxide, chemicals:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 1,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): >

1,000 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Carbon black:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 1,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to algae/aquatic

plants

ErC50 (Desmodesmus subspicatus (green algae)): > 10,000

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

NOEC (Desmodesmus subspicatus (green algae)): > 10,000

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Persistence and degradability

Components:

Glass, oxide, chemicals:

Biodegradability : Result: Not biodegradable

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Remarks: Not applicable

Carbon black:

Biodegradability : Result: Not biodegradable

Bioaccumulative potential

Components:

Carbon black:

Bioaccumulation : Remarks: Does not bioaccumulate.

Mobility in soil
No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If recycling is not practicable, dispose of in compliance with

local regulations.

Do not reuse empty container. Never place unused product

down any indoor or out door drain.

Contaminated/not cleaned containers should be treated/handled like product waste. Dispose of container properly. Refer to applicable Local, State/Provincial, and Federal

Regulations, as well as industry Standards.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

Environmentally hazardous : no

IATA-DGR

UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Packing instruction (cargo : Not applicable

aircraft)

11 / 14

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Packing instruction (passen- : Not applicable

ger aircraft)

IMDG-Code

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
EmS Code : Not applicable

Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

GB 6944/12268

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

Marine pollutant : no

JT/T 617

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable

Environmentally hazardous no

Special precautions for user

Not applicable

15. REGULATORY INFORMATION

National regulatory information

Law on the Prevention and Control of Occupational Diseases

Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals : This product is not listed in the cata-

logue of hazardous chemicals and it does not meet the definition of hazardous chemicals and its principles

of determination.

Identification of Major Hazard Installations for Hazardous Chemicals (GB : Not listed

18218)

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Hazardous Chemicals for Priority Management under : Not listed

SAWS

Catalogue of Specially Controlled Hazardous Chemi: Not listed

cals

List of Explosive Precursors : Not listed

Regulations on Labour Protection in Workplaces where Toxic Substances are Used

Catalogue of Highly Toxic Chemicals : Not listed

Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import : Not listed

and Export

Regulation on the Administration of Precursor Chemicals

Catalogue and Classification of Precursor Chemicals : Not listed

Regulations on the Administration of Controlled Chemicals

List of Controlled Chemicals : Not listed

Regulations of Ozone Depleting Substances Management

List of Controlled Ozone Depleting Substances : Not listed

List of Controlled Ozone Depleting Substances Import : Not listed

and Export

Environmental Protection Law

List of Priority Controlled Chemicals : Not listed

List of Key Controlled New Pollutants : Not listed

16. OTHER INFORMATION

Revision Date : 2025/05/06 Date format : yyyy/mm/dd

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

CN OEL : Occupational exposure limits for hazardous agents in the

workplace - Chemical hazardous agents.

ACGIH / TWA : 8-hour, time-weighted average

CN OEL / PC-TWA : Permissible concentration - time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -

according to GB/T 16483 and GB/T 17519



PTC105L MICROMAX™ CARBON PASTE

Version Revision Date: SDS Number: Date of last issue: -

1.0 2025/05/06 300000005810 Date of first issue: 2025/05/06

Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada): ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

CN / EN