Regulation EC Nr. 1907/2006 Art.31

Product name: Micro-Tec oil based diamond polishing paste

Date: October 5th, 2022

Document Nr.: SDS00129001599

Version: 4.0 Page **1** of **12**

Section 1: Identification of the substance or mixture and the company

1.1. Product Identifier

Micro-Tec DP0.5 oil based diamond polishing paste 0.5μm
Micro-Tec DP0.5 oil based diamond polishing paste 1μm
Micro-Tec DP0.5 oil based diamond polishing paste 1.5μm
Micro-Tec DP0.5 oil based diamond polishing paste 2.5μm
Micro-Tec DP0.5 oil based diamond polishing paste 3.5μm
Micro-Tec DP0.5 oil based diamond polishing paste 5μm
Micro-Tec DP0.5 oil based diamond polishing paste 7μm
Micro-Tec DP0.5 oil based diamond polishing paste 10μm
Micro-Tec DP0.5 oil based diamond polishing paste 14μm
Micro-Tec DP0.5 oil based diamond polishing paste 20μm
Micro-Tec DP0.5 oil based diamond polishing paste 28μm
Micro-Tec DP0.5 oil based diamond polishing paste 40μm
Micro-Tec DP0.5 oil based diamond polishing paste set/12 0.5 to $40\mu m$

1.2 Relevant identified uses of the substance or mixture and uses advised against

Polishing and cleaning hard materials to a mirror finish

Polishing of metallographic and petrographic samples and cross sections

Abrasive material

The substances are not subject to registration according to REACH

1.3. Details of the supplier of the Safety Data Sheet

Rave Scientific

100 Franklin Square Dr.

Suite 101

Somerset, NJ 08873

Telephone: 1-732-898-3828 Email: info@ravescientific.com Web: www.ravescientific.com

1.4 Emergency telephone number

911 (USD) or your national emergency telephone number for chemical spills, leaks, fires, exposures or accidents

(Cont. on page 2)



Regulation EC Nr. 1907/2006 Art.31

Document Nr.: SDS00129001599 **Version:** 4.0 Page **2** of **12**

(Cont. of page 1)

Section 2: Hazards identification

2.1. Classification of the substance or mixture according to Regulation EC Nr. 1272/2008

Physical: Not classified. Low flammability

Health: May be fatal if swallowed and enters airways, cat.1, H304

Causes mild skin irritation, cat. 2, H315 Causes eye irritation, cat. 2B, H320

Environment: Not classified **Other hazards:** Not classified

2.2 Labeling elements accordance to Regulation EC Nr. 1272/2008

Hazard pictogramm(s):





GHS07 GHS08

Signal word: Danger

Hazard statement(s): H304: May be fatal if swallowed and enters airways

H315: Causes mild skin irritation H320: Causes eye irritation

Precautionary statement(s)

Prevention: P102: Keep out of reach of children

P201+P202: Obtain special instructions before use. Do not handle until safety

precautions have read and understood P264: Wash hands thoroughly after handling

P270: Do not eat, drink or smoke when using this product

P273: Avoid release to the environment

P280: Wear protective gloves/protective clothing/eye protection/face

protection

Response:

P308+P313: If exposed or concerned: Get medical attention P304+P315: If inhaled: Get immediate medical advice/attention P302+P352: If on skin: Wash with plenty of water and soap.

P305+P351+P338: If in eyes; rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P391: Collect spillage

Storage: P405: Store locked up (Cont. on page 3)



Regulation EC Nr. 1907/2006 Art.31

Document Nr.: SDS00129001599 **Version:** 4.0 Page **3** of **12**

(Cont. of page 2)

Disposal: P501: Dispose of contents/container in accordance to local/regional/

international regulations

Supplemental hazard info: none

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, the substance is not a PBT or a vPvB

Section 3: Composition / information on components

3.1. Substances

Not applicable

3.2 Mixtures

Component	CAS Nr.	WT%
Distillates (Petroleum), hydrotreated heavy	64742-52-5	10-50
Vegetable oil	68956-68-3	10-35
Polypropylene glycol monobutyl ether	9003-13-8	10-30
Diamond powder	7782-40-3	1-5
Proprietary ingredients	NA	5-15

Section 4: First aid measures

4.1. Description of first aid measures

General information: The usual precautions for handling chemical substances should be observed.

If symptoms should occur, seek medical advice.

Immediately remove any clothing soiled by the product

Contact with eyes: Rinse cautiously with water for several minutes. If possible, remove contact

lenses. Continue rinsing.

Contact with skin: Wash with water and soap.

Seek medical attention if irritation persists.

Inhalation: Fresh air, keep warm and at rest.

Seek medical attention of ill effects occur

Ingestion: If swallowed, do not induce vomiting

Seek immediate medical advice (Cont. on page 4)

(Cont. of page 3)



Regulation EC Nr. 1907/2006 Art.31

Document Nr.: SDS00129001599 **Version:** 4.0 Page **4** of **12**

4.2. Important symptoms and effects, either immediate or delayed

Inhalation: May cause damage to the lungs; chemical pneumonitis

Symptoms: cough, sore throat, asthma

Ingestion: May cause digestive tract irritation

Symptoms: sore throat, abdominal pain, nausea, vomiting

Skin contact: Mildly irritating to skin

Symptoms: redness and pain

Eye contact: Irritating to eyes

Symptoms: redness and pain, impaired vision

4.3. Indication of any immediate medical attention and special treatment

General advise: If you feel unwell, seek medical advice; show product label if possible

If symptoms persist, always call a doctor

Section 5: Firefighting Measures

5.1. Extinguishing media

Use dry chemical, CO2, chemical foam or water spray. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Not flammable or combustible but will burn if involved in a fire. Produces carbon oxides (CO, CO2), irritating smoke

5.3 Advice to firefighters

Fight fire from a safe distance, with adequate cover
Do not allow firefighting water to enter drains or water courses
In case of fire, do not breathe fumes
Wear self-contained breathing apparatus for fire fighting

(Cont. on page 5) (Cont. of page 4)



Regulation EC Nr. 1907/2006 Art.31

Product name: Micro-Tec oil based diamond polishing paste

Date: October 5th, 2022

Document Nr.: SDS00129001599

Version: 4.0 Page **5** of **12**

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Wear suitable protective clothing including eye/face protection
Avoid contact with skin, eys and clothes.
Do not breath dust.

6.2 Environmental precautions

Avoid release to the environment Do not allow to enter public sewers and waterways

6.3 Methods and material for containment and clean up

Clean up spills immediately

Collect spillage and wipe residue with a paper towel wetted with alcohol.

Collect spillage and dirty towels in a sealable waste container

Wash spill area with soap and water to remove last traces of residue

6.4 Reference to other sections

For further information see section 8

Section 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing dust/mist
Ensure adequate ventilation
Avoid contact with skin and eyes
Wash thoroughly after use
Wear protective gloves/protective clothing/eye protection

7.2 Conditions for safe storage, including any incompatibilities

Store locked up in a cool dry place Keep out of reach of children

(Cont. on page 6)



Regulation EC Nr. 1907/2006 Art.31

Document Nr.: SDS00129001599 **Version:** 4.0 Page **6** of **12**

(Cont. of page 5)

7.3 Specific end uses(s)

No information available

Section 8: Exposure control and personal protection

8.1. Control parameters

Exposure limits

Occupational exposure limits (OEL)

Ingredient	TWA	STEL	
Distillates (Petroleum), hydrotreated heavy	200mg/m3	Not available	
Vegetable oil	Not available	Not available	
Polypropylene glycol monobutyl ether	Not available	Not available	
Diamond powder	3mg/m3	Not available	
Micro-Tec oil based diamond polishing paste	Not available	Not available	

8.2 Exposure controls

Control procedures: Ensure adequate ventilation

Personal protection: Take precautions to avoid contact with eyes and skin when handling the products

Inhalation: In case of insufficient ventilation, wear suitable respiratory equipment

Hands and skin: Wear suitable gloves against chemicals; recommended gloves:

Nitrile

Eyes: Wear safety goggles or full-face protection

Environment: Keep away from drains, surface and ground water.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance/physical state: Opaque paste of varying colours due to diamond powder size

Colour: Varying Odour: Mild

pH Not available Boiling point/range: ≥100°C

Flash point: ≥95°C (closed cup)

Evaporation rate: Not available (Cont. on page 7)



Regulation EC Nr. 1907/2006 Art.31

Product name: Micro-Tec oil based diamond polishing paste

Date: October 5th, 2022

Document Nr.: SDS00129001599

Version: 4.0 Page **7** of **12**

(Cont. of page 6)

Explosion limits: upper limit: Not available

lower limit: Not available

Vapour pressure: 1mm @ 1810°C Specific gravity: 0.95 g/cm3 @ 20°C

Solubility in water: Insoluble
Auto-ignition: 215°C

Viscosity: Not availa

Viscosity: Not available

9.2 Other information

VOC: Not relevant

Section 10: Stability and reactivity

10.1. Reactivity

Not reactive under recommend or normal conditions of handling, processing and use

10.2 Chemical stability

Stable at normal temperatures and pressures

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purposes

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data

10.6 Hazardous decomposition products

Carbon oxides (CO, CO2), irritating smoke and toxic fumes

(Cont. on page 8)



Regulation EC Nr. 1907/2006 Art.31

October 5th, 2022 Product name: Micro-Tec oil based diamond polishing paste Date:

Document Nr.: SDS00129001599 Version: 4.0 Page **8** of **12**

(Cont. of page 7)

Section 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure:

Inhalation: May be fatal if swallowed and enters airways

Ingestion: May cause irritation

Skin contact: May cause mild skin irritation, redness or rash

Eye contact: May cause redness, mild eye irritation

CMR effects: Carcinogenicity classification criteria not met based on available data

Germ cell mutagenicity classification criteria not met based on available data

Reproductive toxicity classification not met based on available data.

STOT-single exposure: not classified STOT- repeated exposure: not classified

Aspiration hazard: classification criteria not met based on available data

Toxicological data:

No information available

Symptoms related to physical, chemical and toxicological characteristics

If swallowed: vomiting, nausea, gastrointestinal complaints

If in eyes: Redness, mild eye irritation If inhaled: Data are not available

If on skin: Redness or rash, mild skin irritation

11.2. Endocrine disrupting properties

Not listed

11.3. Toxicity

There is no additional information

Section 12: Ecological information

12.1. Toxicity

No information available

(Cont. on page 9)



Regulation EC Nr. 1907/2006 Art.31

Product name: Micro-Tec oil based diamond polishing paste

Date: October 5th, 2022

Document Nr.: SDS00129001599

Version: 4.0

Page **9** of **12**

(Cont. of page 8)

12.2 Persistence and degradability

No information available

12.3 Bio-accumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

Not listed

12.7 Other adverse effects

No experimental data available

Section 13: Disposal considerations

13.1. Waste treatment methods

Product: This material and its container must be disposed of in a safe way.

Do not discharge into drains or the environment, dispose to an authorised waste

collection point.

National regulations: Disposal should be in accordance with local, state or national legislation.

Section 14: Transport information

14.1. UN number

UN-number: Not applicable

(Cont. on page 10)



Regulation EC Nr. 1907/2006 Art.31

Product name: Micro-Tec oil based diamond polishing paste

Date: October 5th, 2022

Document Nr.: SDS00129001599

Version: 4.0 Page **10** of **12**

(Cont. of page 11)

14.2 UN proper shipping name

Proper shipping name: Not applicable

14.3 Transport hazard class(es)

Class: Not applicable ADR/RID-Classification code: Not applicable

14.4 Packing group

Packing: Not applicable

14.5 Incompatible materials

ADR/RID- Environmentally hazardous: Not applicable IMDG-Marine pollutant: Not applicable IATA/ICAO-Environmentally hazardous:Not applicable

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Not applicable

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Not applicable

15.2 Chemical safety assessment

All substances are listed

(Cont. on page 11)



Regulation EC Nr. 1907/2006 Art.31

Document Nr.: SDS00129001599 **Version:** 4.0 Page **11** of **12**

(Cont. of page 10)

Section 16: Other information

RoHS Directive Compliant

This product is fully compliant with the directive 2100/65/EU Annex II (RoHS). It does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's or PBDE's.

WEEE

This product is not a piece of electrical or electronic equipment, and it therefore not governed by Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)

Abbreviations:

Asp. Tox Aspiration hazard Carc. Carcinogenicity Exp. Exposure Flam. Flammable

GHS Global Harmonised System of Classification of Labelling Chemicals

Irrit. Irritant

LC50 Lethal Concentration 50%

LCLo Lowest published lethal concentration

LD50 Lethal Dose 50% N/A Not applicable N/E Not estimated

PBT Persistent Bio-accumulative and Toxic

WEL Workplace Exposure Limit Repr. Reproductive toxicant

ROHS Restriction of Hazardous Substance
SEM Scanning Electron Microscope
STEL Short-Term Exposure Limit
STOT Specific Target Organ Toxicity

TCLo Lowest published toxic concentration vPvB very Persistent and very Bio-accumulative WEEE Waste Electrical and Electronic Equipment

DSD / DPD label elements



(Cont. on page 12)



Regulation EC Nr. 1907/2006 Art.31

Document Nr.: SDS00129001599 **Version:** 4.0 Page **12** of **12**

(Cont. of page 11)

Full Text Risk and Hazard codes

H304: May be fatal if swallowed and enters airways

H315: Causes mild skin irritation H320: Causes eye irritation

This product should be stored, handled and used in accordance with good industrial hygiene practices and in accordance with any legal regulation.

The information contained herewith is based on the present state of our knowledge and is intended to describe the product from the point of view of safety requirements. It does not guarantee any specific properties.

It is the responsibility of the user to query and verify any information seeming suspect or where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, state, federal and international regulations.

End of document