

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 **Page 1 of 11**

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

1.1. Product Identifier

Mica discs and sheets. EC #: 310-127-2 CAS #: 12001-26-2
The substance is not subject to registration according to REACH

1.2 Relevant applications of the material and uses advised against

Substrate materials for AFM and EM applications

1.3. Company details

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

Rave Scientific: 1-732-898-3828

Section 2: Hazards identification

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

Physical:	0
Health:	Skin corrosion, irritation, category 2, Skin Irrit, H315 Serious eye damage/eye irritation, category 2, Eye Irrit. 2, H319 Specific target toxicity – single exposure, category 3, STOT SE 3, H335
Flammability:	0
Environment:	0
Other hazards:	None

(Contd. on page 2)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 Page 2 of 11

(Contd. of page1)

2.2 Labeling elements

Labelling accordance to Regulation EC. Nr 1272/2008



Hazard pictogram(s):

GHS07

Signal word:

Warning

Hazard statements:

H315: Causes skin irritation
H319: Causes serious eye irritation
H335: May cause respiratory irritation.

Precautionary statement(s)

Prevention:

P201: Keep away from children
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P280: Wear protective gloves/protective clothing/eye protection/face protection
P312: Call a Poison Centre/doctor if you feel unwell
P321: Specific treatment (show label)
P403+P233: Store in a well-ventilated place. Keep container tightly closed
P501: Dispose of contents/container to industrial combustion plant

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

(Contd. on page 3)

Safety Data Sheet

Regulation EC Nr. 1907/2006 Art.31

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 Page 3 of 11

(Contd. of page 2)

Section 3: Composition / information on components

3.1. Substances

Mica discs and sheets. EC #: 310-127-2 CAS #: 12001-26-2

3.2 Mixtures

Not applicable

Section 4: First aid measures

4.1. Description of first aid measures

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 if ill effects occur
Ingestion: If swallowed, do not induce vomiting. Seek immediate medical advice

4.2. Important symptoms and effects, either immediate or delayed

Inhalation: May cause: Cough. Sore throat. Shortness of breath. Asthma reaction
Ingestion: Not known to date
Skin contact: May cause an allergic skin reaction, rash.
Eye contact: May cause erythema (redness)

4.3. Indication of any immediate medical attention and special treatment

General advice: If you feel unwell, seek medical advice; show product label if possible
If symptoms persist, always call a doctor

(Contd. on page 4)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 **Page 4 of 11**

(Contd. of page 3)

Section 5: Firefighting Measures

5.1. Extinguishing media

Water, foam, ABC powder. Do not use water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustions products are Carbon monoxide (CO) and Carbon dioxide (CO₂).

5.3 Advice to firefighters

Fight fire from a safe distance, with adequate cover
Do not move the load if exposed to heat.
In case of fire: do not breathe fumes
Wear self-contained breathing apparatus for fire fighting

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment
Keep unprotected persons away
Avoid dust formation. Avoid breathing mist, vapours or gas.

6.2 Environmental precautions

Keep away from drains, surface and groundwater. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and clean up

Covering of drains.
Pick up mechanically. Avoid raising dust.
Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

For further information see section 7, 8 and 13.

(Contd. on page 5)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 **Page 5 of 11**

(Contd. of page 4)

Section 7: Handling and storage

7.1. Precautions for safe handling

Avoid creating or accumulating dust or fine particles
Avoid breathing dust or fumes
Avoid contact with eyes, skin and clothing
Do not eat, drink or smoke when using this product

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in a cool, well-ventilated place
Removal of dust deposits
Keep out of reach of children

7.3 Specific end uses(s)

Not required

Section 8: Exposure control and personal protection

8.1. Control parameters

Occupational exposure limits (OEL)

Ingredient	Material Name	Source	TWA	STEL	Ceiling -C	Notes
Mica	Mica (dust)	GB	0.8 mg/m ³		Not available	Not available

8.2 Exposure controls

Control procedures: Avoid creating or accumulating dust or fine particles
Avoid contact with eye, skin and clothing
Wash hands before breaks and at the end of the work
Maintain appropriate working environment

Personal protection: Protective work clothing

(Contd. on page 6)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0
Page 6 of 11

Inhalation:	Use breathing protection with high concentrations	(Contd. of page 5)
Hands and skin:	Suitable gloves	
Eyes:	Wear safety goggles with side protection or full-face protection	
Environment:	Use appropriate container to avoid environmental contamination	

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance/physical state:	Solid in various forms
Colour:	Translucent ruby
Odour:	None
pH	Not applicable
Melting point/range:	1300°C
Boiling point/range:	Not applicable
Flammability:	This material is combustible, but will not ignite readily
Flash point:	Not determined
Evaporation rate:	Not available
Explosion limits: upper limit:	Not determined
lower limit:	Not determined
Vapour pressure:	Not applicable
Relative density:	2.77 g/cm ³ @ 20°C
Solubility in water:	Not soluble
Auto-ignition:	Not determined
Viscosity:	Not applicable

9.2 Other information

Solid content: 100%.

Section 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions known if used for its intended purposes

10.2 Chemical stability

Stable under recommended storage conditions

(Contd. on page 7)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 Page 7 of 11

(Contd. of page 6)

10.3 Possibility of hazardous reactions

No known hazardous reactions

10.4 Conditions to avoid

Avoid creating dust or accumulating dust or fine particles

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

As a results of use, storage, spillage and heating are not known.
Hazardous combustions products are Carbon monoxide (CO) and Carbon dioxide (CO₂).

Section 11: Toxicological information

11.1. Information on toxicological effects

Information hazard classes as defined in Regulation (EC) Nr. 1272/2008

Acute toxicity: Shall not be classified as acutely toxic
Inhalation: Shall not be classified as presenting an aspiration hazard
Skin contact: Causes skin irritation
Eye contact: Causes serious eye irritation
Sensitisation: Shall not be classified as a respiratory or skin sensitiser
Germ cell mutagenicity: Shall not be classified as germ cell mutagenic
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity – single exposure: May cause respiratory irritation
Specific target organ toxicity – repeated exposure: Shall not be classified as a specific target toxicant (repeated exposure)

Toxicological data:

No data available

(Contd. on page 8)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 **Page 8 of 11**

(Contd. of page 7)

11.2. Endocrine disrupting properties

Not listed

11.3. Information on other hazards

There is no additional information

Section 12: Ecological information

12.1. Aquatic toxicity

Shall not be classified as hazardous to the aquatic environment

12.2 Persistence and degradability

No information available

12.3 Bio-accumulative potential

Data are not available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

Data are not available

12.6 Endocrine disrupting properties

Data are not available

12.7 Other adverse effects

Data are not available

(Contd. on page 9)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 **Page 9 of 11**

(Contd. of page 8)

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: N/A

14.2 UN proper shipping name

Proper shipping name: N/A

14.3 Transport hazard class(es)

Class: N/A
ADR/RID-Classification code: N/A

14.4 Packing group

Packing: N/A

14.5 Environmental Hazards

No information available

14.6 Special precautions for user

Environmental hazards: None

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

Not applicable (Contd. on page 10)

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 Page **10** of **11**

(Contd. of page 9)

Section 15: Regulatory information

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

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer, Annex 1&11: not listed
Regulation (EC) No 850/2004 on persistent organic pollutants: not listed
Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals Annex I, Part1, 2&3: not listed
Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals Annex V, Not listed
Regulation (EC) No166/2006 Annex II Pollutant release and transfer registry: not listed
Regulation (EC) No 1907/2006, REACH Article 59(10) candidate list: not listed

15.2 Chemical safety assessment

List of substances to authorization (REACH, Annex XIV)/SVHC – candidate list: not listed

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
ErC50	Concentration resulting in a 50% reduction in growth rate with 72 hrs exposure
EC50	Half maximal concentration which induces a response halfway between baseline and maximum effect
Exp.	Exposure
Flam.	Flammable

(Contd. on page 11)

Safety Data Sheet

Regulation EC Nr. 1907/2006 Art.31

Product name: Mica
Document Nr.: SDS0011008310

Date: October 5th 2022
Version: 4.0 Page **11** of **11**

(Contd. of page 10)

GHS	Global Harmonised System of Classification of Labelling Chemicals
Irrit.	Irritant
N/A	Not applicable
N/E	Not estimated
NOEC	No observed effect concentration
LC50	Lethal dose single exposure to causing 50% lethality
LD50	Lethal dose 50% corresponds to causing 50% lethality during a specific time
PBT	Persistent Bio-accumulative and Toxic
WEL	Workplace Exposure Limit
Repr.	Reproductive toxicant
RoHS	Restriction of Hazardous Substance
SVHC	Substance of very high concern
VOC	Volatile organic compound
vPvB	very Persistent and very Bio-accumulative
WEEE	Waste Electrical and Electronic Equipment

Relevant phrases

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H335 - May cause respiratory 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.

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