



Safety Data Sheet

Regulation EC No 1907/2006 Art.31

Productname :

Creationdate :

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Ref.Nr.: SDS0015001133-01

Pages 8

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

EM-Tec C33 fast drying conductive carbon paint.

The substance is not subject to registration according to REACH

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

Against electrostatic charge and making grounding paths for SEM samples

1.3. Details of the supplier of the safety data sheet

Micro to Nano B.V.

Tappersweg 91

2031ET Haarlem

Netherlands

Tel: +31(0)85-2013155

E: info@microtonano.com

1.4. Emergency telephone number

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

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Physical:	Flammable liquid, category 2 Highly flammable liquid and vapour. Classification is based on test data.
Health:	Eye irritation, category 2 Causes serious eye irritation. Specific target organ toxicity - single exposure, category 3 May cause drowsiness or dizziness. Classification based on calculation method.
Environment:	Not classified Classification based on calculation method.
Other hazards :	Not classified

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Product identifier:	Contains: propan-2-ol; isopropyl alcohol; isopropanol
Hazard pictogram(s):	 
Signal word:	Danger
Hazard statement(s):	H225 : Highly flammable liquid and vapour. H319 : Causes serious eye irritation. H336 : May cause drowsiness or dizziness.
Precautionary statement(s):	P102 : Keep out of reach of children. P210 : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 : Keep container tightly closed. P261 : Avoid breathing dust/fume/gas/mist/vapours/spray. P280 : Wear protective gloves/protective clothing/eye protection/face protection. P304/340 : IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305/351/338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P403/235 : Store in a well-ventilated place. Keep cool. P501-2 : Dispose of contents/container to an authorised waste collection point.

2.3. Other hazards

No information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Hazardous ingredient	Registration number	CAS-nr.	EC-nr	w/w %	Hazard Class and Category	Hazard statement	Notes
propan-2-ol; isopropyl alcohol; isopropanol	01-2119457558-25	67-63-0	200-661-7	75-100	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3	H225,H319,H336	B
Graphite	01-2119486977-12	7782-42-5		5-10	-	-	G
Explanation notes							
B : substance with national established workplace exposure limit							
G : exempted from the obligation to register in accordance with art.2(7)of REACH Regulation No 1907/2006							

(* Explanation phrases : see chapter 16)

SECTION 4: First aid measures

4.1. Description of first aid measures

Contact with eyes :	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. 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 medical advice

4.2. Most important symptoms and effects, both acute and delayed

Inhalation :	Excessive inhalation of solvent vapours may give rise to nausea, headaches and dizziness
Ingestion :	May cause gastrointestinal disturbances 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 needed

General Advice :	If you feel unwell, seek medical advice (show the label where possible) If symptoms persist always call a doctor
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SECTION 5: Firefighting measures

5.1. Extinguishing media

foam, carbon dioxide or dry agent

5.2. Special hazards arising from the substance or mixture

May form explosive vapour/air mixtures
Forms hazardous decomposition products
CO,CO2

5.3. Advice for firefighters

Keep container(s) exposed to fire cool, by spraying with water
In case of fire, do not breathe fumes

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Shut off all ignition sources
Ensure adequate ventilation
Wear suitable protective clothing including eye/face protection.

6.2. Environmental precautions

Do not allow to enter public sewers and watercourses

6.3. Methods and material for containment and cleaning up

Absorb spillage in suitable inert material

6.4. Reference to other sections

For further information see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat and sources of ignition
Take precautionary measures against static discharges
Equipment should be earthed
Use explosion-proof electrical/ventilating/lighting/.../equipment.
Use only non-sparking tools.
Do not breathe aerosols or vapours.
Ensure adequate ventilation
Avoid contact with skin and eyes.
Wash thoroughly after use
Wear protective gloves/protective clothing/eye protection/face protection.
Eyewash bottles should be available

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in a cool, well ventilated place.
Keep out of reach of children.

7.3. Specific end use(s)

Against electro-static charge

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits :

Hazardous ingredient	CAS-nr.	method	
EU established exposure limits:			
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0	TWA	400 ppm
		STEL	500 ppm

National established exposure limits, United Kingdom			
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0	TWA	400 ppm
		STEL	500 ppm

8.2. Exposure controls

Control procedures :	Ensure adequate ventilation Keep away from heat and sources of ignition Take precautionary measures against static discharges
Personal protection :	Take precautions to avoid contact with skin and eyes when handling the product. It is good practice to wear gloves and to provide adequate ventilation whenever using the product. In all cases handle and use the product in accordance with good industrial hygiene practices.
inhalation :	In case of insufficient ventilation, wear suitable respiratory equipment.
recommended respiratory protection:	Air purifying respirator equipped with organic gas/vapor cartridge (type A)
hands and skin :	Wear suitable protective gloves against chemicals. Check the appropriateness of the recommended gloves for your own particular conditions of use and replace gloves regularly after check for signs of damage or defects.
Recommended gloves:	Nitrile
eyes :	Wear safety eyewear according to EN 166.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance : physical state :	Liquid.
colour :	Black.
odour :	Alcohol.
pH :	Not applicable.
Boiling point/range :	Not available.
Flash point :	12 °C (Closed Cup)
Explosion limits : upper limit :	Not available.
lower limit :	Not available.
Vapour pressure :	Not available.
Relative density :	0.84 g/cm ³ (@ 20°C).
Solubility in water :	Miscible with water
Auto-ignition :	425 °C

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions known if used for its intended purpose

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose

10.4. Conditions to avoid

Avoid overheating

10.5. Incompatible materials

Strong oxidising agent

10.6. Hazardous decomposition products

CO,CO2

SECTION 11: Toxicological information

11.1. Information on toxicological effects

acute toxicity:	based on available data the classification criteria are not met
skin corrosion/irritation:	based on available data the classification criteria are not met
serious eye damage/irritation:	Causes serious eye irritation.
respiratory or skin sensitisation:	based on available data the classification criteria are not met
germ cell mutagenicity:	based on available data the classification criteria are not met
carcinogenicity:	based on available data the classification criteria are not met
toxicity for reproduction:	based on available data the classification criteria are not met
STOT-single exposure:	May cause drowsiness or dizziness.
STOT repeated exposure:	based on available data the classification criteria are not met
aspiration hazard:	based on available data the classification criteria are not met

Information on likely routes of exposure:

Inhalation :	Excessive inhalation of vapours may give rise to irritation and affect the nervous system
Skin contact :	Prolonged skin contact will result in defatting of the skin, leading to irritation, and in some cases, dermatitis
Eye contact :	Irritating to eyes

Toxicological data :

Hazardous ingredient	CAS-nr.	method	
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0	LD50 oral rat	5840 mg/kg
		LC50 inhal.rat	> 25000 mg/l
		LD50 derm.rabit	13900 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

Not classified

Ecotoxicological data:

Hazardous ingredient	CAS-nr.	method	
propan-2-ol; isopropyl alcohol; isopropanol	67-63-0	IC50 algae	1000 mg/l

		LC50 fish	9640 mg/l
		EC50 daphnia	9714 mg/l

12.2. Persistence and degradability

No experimental data available

12.3. Bioaccumulative potential

No experimental data available

12.4. Mobility in soil

Insoluble in water

12.5. Results of PBT and vPvB assessment

No information available

12.6. Endocrine disrupting properties

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 : 1219

14.2. UN proper shipping name

Proper shipping name: ISOPROPANOL

14.3. Transport hazard class(es)

Class: 3
ADR/RID - Classification code: F1

14.4. Packing group

Packing group: II

14.5. Environmental hazards

ADR/RID - Environmentally hazardous:	No
IMDG - Marine pollutant:	No
IATA/ICAO - Environmentally hazardous:	No

14.6. Special precautions for user

ADR/RID - Tunnelcode:	(D/E)
IMDG - Ems:	F-E, S-D
IATA/ICAO - PAX:	353
IATA/ICAO - CAO	364

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

The Safety Data Sheet is compiled according to the current European requirements.
 Regulation (EC) No 1907/2006 (REACH)
 Regulation (EC) No 1272/2008 (CLP)

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

*Explanation hazard statements:	- : - H225 : Highly flammable liquid and vapour. H319 : Causes serious eye irritation. H336 : May cause drowsiness or dizziness.
REVISIONS IN CHAPTRE :	8.2. Exposure controls
acronyms and synonyms:	TWA = time weight average STEL = short time exposure limit VOC = volatile organic compounds PBT = persistant bioaccumulative toxic vPvB = very persitant very bioaccumulative

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

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