Texas State University							
	Dr. lr. Wilhelmus J. Geerts						

DATA	Sheet	
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Distributor :DOWA ELECTRONICS MATERIALS CO., LTD 14-1 SOTOKANDA 4-CHOME, CHIYODA-KU, TOKYO 101-0021 JAPAN

Manufacturer: DOWA F-Tec Co.,Ltd 1089 KICHIGAHARA, MISAKI-CHO KUME-GUN, OKAYAMA Pref.,JAPAN

Product	Name:	OP-56	 •		
		Remarks			
		FREE SAMPLE	 		 

# DATA

								r
			COMPRE	ESSION M	DULDING	BULK		
Lot.No	APD	CD	Br	HcB	HcJ	HcJ	MOISTURE	Quantity
(Unit)	$\mu$ m	g/cm3	m T	kA/m	kA/m	kA/m	mass%	Kg
(Standard)								
				:				
02856	1.01	3.09	190	129.0	246.0	293.7	0.12	0.5
			•					

Assistant Manager Quality Assurance Section.

N. NOBUOKA

M. Mh

Texas State University	
Dr. lr. Wilhelmus J. Geerts	ì

DATA	Sheet	
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Distributor :DOWA ELECTRONICS MATERIALS CO., LTD 14-1 SOTOKANDA 4-CHOME, CHIYODA-KU, TOKYO 101-0021 JAPAN

Manufacturer: DOWA F-Tec Co.,Ltd 1089 KICHIGAHARA, MISAKI-CHO KUME-GUN, OKAYAMA Pref.,JAPAN

Product Name:	OP-71		
	Remarks		
	FREE SAMPLE		

# DATA

DATA								
			COMPRE	COMPRESSION MOULDING				
Lot.No	APD	CD	Br	HcB	HoJ	HcJ	MOISTURE	Quantity
٠								
(Unit)	μm	g/cm3	m ⊤	kA/m	kA/m	kA/m	mass%	Kg
(Standard)								
34788	1.41	3.33	191	123.4	199.8	249.9	0.11	0.5
								:

Assistant Manager Quality Assurance Section.

N. NOBUOKA

M. Nohn

according to Regulation (EC) No. 1907/2006

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1.4

12.03.2020

232619-00001

Date of first issue: 12.03.2020

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

#### 1.1 Product identifier

Trade name

: Strontium Ferrite (All DOWA Products )

REACH Registration Number : 01-2119552444-40-0001

Substance name

: dodecairon strontium nonadecaoxide

EC-No.

234-685-4

CAS-No.

12023-91-5

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

Use of the Substance/Mixture

: Raw material

# 1.3 Details of the supplier of the safety data sheet

Company

: DOWA F-TEC Co., Ltd.

Quality Assurance Dept.

1045 Kichigahara, Misaki-cho, Kume-gun

Okayama, Japan

Telephone

: +81-868-62-1144

E-mail address of person

responsible for the SDS

: sakait@dowa.co.jp

#### 1.4 Emergency telephone number

+81-868-62-1185 (8:00 - 16:10 JST)

#### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

## 2.3 Other hazards

No data available.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Substance name

: dodecairon strontium nonadecaoxide

according to Regulation (EC) No. 1907/2006

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Hazardous components

Remarks

: No hazardous ingredients

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice

: In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders

: No special precautions are necessary for first aid responders.

If inhaled

: If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact

: Wash with water and soap.

Get medical attention if symptoms occur.

In case of eye contact

: If in eyes, rinse well with water.

Get medical attention if irritation develops and persists.

If swallowed

: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

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

Risks

: No data available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment

: No data available.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media

: Not combustible .

Unsuitable

extinguishing media

: No information available.

# 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire

fighting

: None known.

according to Regulation (EC) No. 1907/2006

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Hazardous combustion prod-

ucts

: No information available.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters

: Wear self-contained breathing apparatus for firefighting if nec-

essary. Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do

Evacuate area.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

: Follow safe handling advice and personal protective equip-

ment recommendations.

#### 6.2 Environmental precautions

Environmental precautions

: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up

: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### 6.4 Reference to other sections

See sections; 7, 8, 11, 12 and 13.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

according to Regulation (EC) No. 1907/2006

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Technical measures

: No information available.

Local/Total ventilation

: Use only with adequate ventilation.

Advice on safe handling

: Do not breathe dust.

Handle in accordance with good industrial hygiene and safety

practice.

Minimize dust generation and accumulation. Keep container closed when not in use.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures

: When using do not eat, drink or smoke.

Wash contaminated clothing before re-use.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: No Special storage condition required

Advice on common storage

: No information available.

# 7.3 Specific end use(s)

Specific use(s)

: No data available

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
dodecairon strontium nonadecaoxide	Workers	Inhalation	Long-term local effects	42 mg/m3

#### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
dodecairon strontium nonadecaoxide	Fresh water	0.5 mg/l
	Marine water	1 mg/l
	Intermittent use/release	5 mg/l
	Sewage treatment plant	50 mg/l

according to Regulation (EC) No. 1907/2006

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#### 8.2 Exposure controls

#### **Engineering measures**

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

# Personal protective equipment

Eye protection

Wear the following personal protective equipment:

Safety goggles

Hand protection

Material

: Impervious gloves

Remarks

: For prolonged or repeated contact use protective gloves. Wash hands before breaks and at the end of workday.

Skin and body protection

: Skin should be washed after contact.

Respiratory protection

Use respiratory protection unless adequate local exhaust ven tilation is provided or exposure assessment demonstrates that

exposures are within recommended exposure guidelines.

Filter type

: Particulates type (P)

# SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance

: powder, Crystalline solid

Colour

: brown, black

Odour

: odourless

Odour Threshold

: No data available

рΗ

: No data available

Melting point/freezing point

: > 1,300 °C

Initial boiling point and boiling

range

: Not applicable

Flash point

: Not applicable

Evaporation rate

: Not applicable

Flammability (solid, gas)

: Not applicable

Upper explosion limit

: Not applicable

according to Regulation (EC) No. 1907/2006

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Lower explosion limit

: Not applicable

Vapour pressure

: Not applicable

Relative vapour density

: Not applicable

Density

: ca. 5.11 g/cm3

Solubility(ies)

Water solubility

: No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature

: No data available

**Decomposition temperature** 

: No data available

Viscosity

Viscosity, dynamic

: Not applicable

Explosive properties

: Not explosive

Oxidizing properties

: Not applicable

#### 9.2 Other information

No data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

Not applicable

#### 10.2 Chemical stability

Stable under normal conditions.

# 10.3 Possibility of hazardous reactions

Hazardous reactions

: Not applicable

#### 10.4 Conditions to avoid

Conditions to avoid

: None known.

#### 10.5 Incompatible materials

Materials to avoid

: None known.

#### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

according to Regulation (EC) No. 1907/2006

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#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Information on likely routes of : Inhalation

exposure

Skin contact Ingestion Eye contact

#### Acute toxicity

Not classified based on available information.

#### Skin corrosion/irritation

Not classified based on available information.

# Serious eye damage/eye irritation

Not classified based on available information.

# Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

#### Reproductive toxicity

Not classified based on available information.

## STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

#### Aspiration toxicity

Not classified based on available information.

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

No data available

#### 12.2 Persistence and degradability

No data available

# 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

Not relevant

according to Regulation (EC) No. 1907/2006

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12.6 Other adverse effects

No data available

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

**Product** 

: Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Contaminated packaging

: Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

#### SECTION 14: Transport information

#### 14.1 UN number

Not regulated as a dangerous good

#### 14.2 UN proper shipping name

Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

#### 14.4 Packing group

Not regulated as a dangerous good

# 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

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

Remarks

: Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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

Regulation (EC) No 649/2012 of the European Parlia ment and the Council concerning the export and import

: Not applicable

of dangerous chemicals

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: Not applicable

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

: Not applicable

Regulation (EC) No 850/2004 on persistent organic pol-

: Not applicable

according to Regulation (EC) No. 1907/2006

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#### lutants

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of majoraccident hazards involving dangerous substances Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

#### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

(Q)SAR - (Quantitative) Structure Activity Relationship; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; 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; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA -Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

#### **Further information**

Sources of key data used to compile the Safety Data Sheet

: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

according to Regulation (EC) No. 1907/2006

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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 is designed only as a guid ance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provid ed relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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