SAFETY DATA SHEET

Creation date: 10 -Jun -2016 Revision date: 25-Jan-2021

1. Identification of the substance and of the company

Product name : Miracle Media MM-PF (Phenol-formaldehyde resin)

Description : Phenol-formaldehyde resin spherical granules

Manufacturer : HIEDA CHEMICAL INDUSTRY Co.,Ltd.

3-8-1Takao, Tanabe-shi, Wakayama-ken 646-0028, Japan

Department : Quality Audit Department

Emergency Telephone Number: 0739-22-3838 (FAX 0739-22-4193)

Recommended use: Abrasive blasting media for dry/wet Sandblasting for the purpose of

paint stripping and deburring of plastic molding

2. Hazard identification

[GHS Classification/GHS Label Elements]

	Classification		Labeling		Hazard
	Hazard Class	Hazard category	Pictogram	Signal Word	Statement Codes
Health Hazards	Acute toxicity Oral	5	No pictogram	Warning	H303
	Acute toxicity Inhalation	5	No pictogram	Warning	H333
	Eye Irritation	2B	No pictogram	Warning	H320
	Specific target organ toxicity-single exposure	3	<u>(1)</u>	Warning	H335
	Specific target organ toxicity-repeated exposure	2		Warning	H373
Environmental Hazards	Hazardous to the aquatic environment, long-term (chronic)	4	No pictogram	No signal word	H413

Hazard statements

H320 Causes eye irritation

H335 May cause respiration irritation

H373 May cause damage to the respiratory organs through prolonged or repeated exposure

H303+H333 May be harmful if swallowed or if inhaled

H413 May cause long lasting harmful effects to aquatic life

Precautionary statements

[Prevention]

P102 Keep out of reach of children.

P103 Read label before use.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P273 Avoid release to the environment.

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

[Response]

P301+P312 IF SWALLOWED: Call a POISON CENTER/doetor if you feel unwell.

P304+P312 IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

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

P370 In case of fire: Use foam, carbon dioxide (CO2), dry chemical or water spray.

P391 Collect spillage.

[Disposal]

P501 Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

3. Composition/information on ingredients

Formula : homogeneous material

Chemical Name & Synonyms : Phenol-formaldehyde cured resin

Composition (wt%) : Phenol-formaldehyde cured resin 95-100wt%

Phenol <1wt% Formaldehyde <1wt%

Phenol-formaldehyde cured resin

CSCL No. : 7-903 CAS No. : 9003-35-4

Chemical/Structural formula : (C₆H₅O)m • (CH₂)n

Phenol Phenol

CSCL No. : 3-481 CAS No. : 108-95-2 Chemical/Structural formula : C_6H_5OH

Formaldehyde

CSCL No. : (2)-482
CAS No. : 50-00-0
Chemical/Structural formula : HCHO

4. First-aid measures

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

Inhalation : Rinse mouth. If swallowed: Call a POISON CENTER/doctor if you feel

unwell. Get medical advice/attention.

Ingestion : Rinse mouth. If swallowed: Call a POISON CENTER/doctor if you feel

unwell. Get medical advice/attention.

5. Fire-fighting measures

Suitable extinguishing Media: Use foam, carbon dioxide (CO2), dry chemical or water spray.

Protective equipment and precautions for firefighters

Hazardous combustion products: Carbon monoxide (CO), Carbon dioxide (co2).In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions

Stop people from entering the area by putting a something such as a rope around it. Collect spillage immediately.

CAUTION: Released resin granules produce very slippery walking surfaces.

Environmental Precautions

Waste should not be released to sewers/rivers.

See section 13 to dispose recoveries.

7. Handling and storage

Advice on safe handling

Keep out of reach of children.

If released on the floor, collect spillage immediately.

Dust cloud of this product may cause a dust explosion.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

Use in a closed structure equipment.

Provide appropriate local exhaust ventilation.

Take precautionary measures against static discharges.

Wear protective gloves/protective clothing/eye protection/face protection.

Eating and drinking should be prohibited in areas where this product is handled and stored.

Storage Condition

Keep products from excessive heat, a fire and source of ignition.

Do not break containers and packaging.

Protect from sunlight. Sunlight damages containers and packaging.

Keep in a dark and cool place.

8. Exposure controls/personal protection

Engineering Controls

Seal a whole equipment

Provide appropriate local exhaust ventilation.

The exposure limit: Inhalable 2mg/m3, Total 8mg/m³

Personal protective equipment

Respiratory Protection : Approved air-purifying respirator

Eye Protection : Safety glasses with side shield (or goggles).

Hand Protection : Protective gloves

Body Protection : Suitable protective clothing

9. Physical and chemical properties

Physical State : Solid

Appearance : Yellow brown granules with a spherical shape

Particle size : $50-2000 \, \mu \, \mathrm{m}$ Specific gravity : 1.15-1.25 Flash point : No data Water solubility : Insoluble Solubility in other solvents : Insoluble

Explosive properties : Dust may form explosible mixture in air Softening Point : Not applicable (Thermosetting resin)

Decomposition temperature: No data

10. Stability and reactivity

Stability : Stable under recommended handling and storage conditions.

Reactivity : May turn red-brown with sunlight or long-time preservation.

Possibility of

hazardous reactions : May ignite at temperature in excess of 120°C.

Conditions of avoid : High temperature, wet and direct sunlight

Hazardous

decomposition products: Phenol, formaldehyde and ammonia may form at high temperature.

11. Toxicological information

Product

Acute toxicity : IF INHALED: May cause damage to the respiratory organs

Repeated exposure : May cause damage to the respiratory organs

Eye irritation : IF IN EYES: May cause corneal injury.

	Composition	Acute	Acute	Acute	Acute	Acute
	(wt%)	toxicity-	toxicity-	toxicity-	toxicity-	toxicity-
		oral	dermal	inhalation	inhalation	inhalation
				gas	vapor	mist
Phenol-	95-100	Not	Not	Not	Not	Not
formaldehyde		classified	classified	classified	classified	classified
cured resin						
Phenol	<1	4	3	Not	Not	Not
		375mg/kg		applicable	classified	classified
Formaldehyde	<1	4	3	2	Not	Not
					classified	classified
Product	•	Not	Not	Not	Not	Not
		applicable	applicable	applicable	classified	classified

12. Ecological information

Product

Suspended solids : $\langle 200 \text{mg}/\ell \rangle$

Degradability : No information available
Persistence : No information available
Bioaccumulation : No information available

13. Disposal considerations

Waste should not be released to sewers and rivers.

Recycling of containers and packaging is recommended.

Refer to manufacturer or supplier for information on recovery or recycling of unused/contaminated products.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Products, containers and packaging can be burned in suitable incineration facilities.

14. Transport information

Appropriate transport method: Aircraft, Ships, Automobile, Train

UN No. : Not regulated UN Proper Shipping Name : Not regulated Transport Hazard class : Not regulated : Not regulated : Not regulated

Cautions

Do not break containers and packaging.

Fix firmly to prevent load collapse.

Transport in accordance with transportation related laws and regulations.

15. Regulatory information

Poisonous and Deleterious Substances Control Law : Not regulated

PRTR Law : Not regulated

RoHS restricted substances : Less than allowable concentration

16. Other information

References

- 1) Recommendations of the Japan Society for Occupational Health
- 2) Threshold Limit Values for Chemical Substance and Physical Agents and Biological Exposure Indices ACGIH (2002)
- 3) http://www.safe.nite.go.jp/japan/db.html
- 4) Chemical disaster prevention indicator, Chemical Society of Japan, 1980
- 5) Registry of Toxic Effects of Chemical Substance 2003
- 6) Manual addicted to industry
- 7) Chemical substances subject to the Chemical Substance Control Law, the revision fifth edition, 2011

Disclaimer

This information is based on information that HIEDA CHEMICAL INDUSTRY believes to be accurate. No warranty, either expressed or implied, is hereby made.

The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, users should make their investigations to determine the suitability of the information for their particular purposes.

HIEDA CHEMICAL INDUSTRY assumes no legal responsibility for use or reliance of the information.

Prepared by: HIEDA CHEMICAL INDUSTRY-Quality Audit Department