

Last revised date : 2022-01-11
MSDS No. :

Safety Data Sheet(SDS)

1. Identification of the substance/mixture and of the company/undertaking

1) Product identifier : MRC380D5

2) Relevant identified uses of the substance or mixture and uses advised against

○ Relevant identified uses

29.Polymer preparations and compounds

○ Uses advised against

Prohibition of use other than the manufacture of plastic products

3) Supplier information

○ Company name [Manufacture]

Company : LGC 여수(화차)

Address : 55, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea/ 116-8, Yeosusandan 2-ro, Yeosu-si, Jeollanam-do, Republic of Korea

Emergency number : 82-42-719-3684

2. HAZARD IDENTIFICATION

1) Hazard classification

Not applicable

2) Allocation label elements

Hazard pictograms

Signal word

- NONE

Hazard statements

No data available

Precautionary statements

Not applicable

3) Other hazards

○ Product NFPA Level

Health	Flamm ability	Reactivity
0	0	0

(※ 0 = Insufficient , 1 = Slightly , 2 = ordinary , 3 = Highness , 4 = Very high)

3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
ABS resin	ABS resin	9003-56-9	90 ~ 100
N,N'-ethylenedi(stearamide)	N,N'-ethylenedi(stearamide)	110-30-5	1 ~ 5
Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile	Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile	25213-88-1	1 ~ 5

Components not listed do not contain hazardous/hazardous substances according to the Occupational Safety and Health Act.

4. FIRST AID MEASURES

1) Following eye contact

- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.

2) Following skin contact

No data available

3) Following inhalation

No data available

4) Following ingestion

- Get medical aid immediately.

5) Advice to physician

No data available

5. FIRE FIGHTING MEASURES

1) Suitable (and unsuitable) extinguishing media

○ Suitable extinguishing media

- Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).

○ Unsuitable extinguishing media

- High-pressure water (Unsuitable extinguishing media).

2) Special hazards arising from the substance or mixture

○ Pyrolytic product

- Specific hazards arising from the chemical : Carbon oxides

○ Risk of fire and explosion

- Some may burn but none ignite readily.

○ Other

- No data available

3) Special protective equipment for firefighters

- Protective equipment and precautions to be worn in case of fire: Wear a breathing mask if possible

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
- Wear suitable personal protective equipment

2) Environmental precautions

No data available

3) For cleaning up

No data available

7. HANDLING AND STORAGE

1) Precautions for safe handling

- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)
- Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.

2) Conditions for safe storage (including any incompatibilities)

- Store in a cool/low-temperature, well-ventilated {dry} place {away from heat and ignition sources}

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
ABS resin	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
N,N'-ethylenedi(stearamide)	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable
Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile	TWA : Not applicable STEL : Not applicable	TWA : Not applicable STEL : Not applicable	Not applicable

2) Appropriate engineering controls

- Not applicable

3) Personal protection equipment

- Respiratory protection
 - If high frequency of use or exposure, wear air respirator.
 - Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.
- Eye protection
 - Wear suitable protective goggles and face shields.
- Hand protection
 - Wear suitable protective gloves.
- Body protection
 - Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pellet
Physical state	Solid
Colour	No data available
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability(solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available

Vapour pressure	No data available
Solubility(ies)	No data available
Vapour density	No data available
Relative density	No data available
n-octanol/water partition coefficient	No data available
Auto ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	No data available

10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
 - May cause toxic effects if inhaled.
 - Fire may produce irritating and/or toxic gases.
 - Some may burn but none ignite readily.
- 2) Conditions to avoid
 - Ignition source(heat, spark, flame, etc.).
- 3) Incompatible materials
 - No data available
- 4) Hazardous decomposition products
 - No data available

11. TOXICOLOGICAL INFORMATION

- 1) Exposure route information
 - Inhalation
 - After inhalation: No data
 - Skin Contact
 - Following skin contact: No data
 - Eye Contact
 - After eye contact: No data
 - Ingestion
 - Ingestion by mouth: No data available
- 2) Health hazard information

- Acute toxicity
 - Acute toxicity(Oral) PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : LD50> 5000 mg / kg, Source: IUCLID
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
 - Acute toxicity(Dermal) PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : LD50> 2000 mg / kg, Source: IUCLID
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
 - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
 - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
 - Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
- Skin corrosion/irritation PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
- Serious eye damage/eye irritation PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available
- Respiratory sensitization PRODUCT : Not classified

- ABS resin : No data available
- N,N'-ethylenedi(stearamide) : No data available
- Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Skin sensitization PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Carcinogenicity PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Germ cell mutagenicity PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : In vitro / audio, Source: IUCLID
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Reproductive toxicity PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Specific target organ toxicity single exposure PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Specific target organ toxicity repeated exposure PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Aspiration hazard PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available

- Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish>PRODUCT : Not classified
 - ABS resin : LC50 11.5 mg / ℓ 96 hr Pimephales promelas, Source: ECOTOX
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Crustacea>PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Aquatic algae>PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

2) Persistence and degradation

- n-octanol water partition coefficient>PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : 13.98 log Kow (@ 25 °C), Source: ECHA
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Degradation>PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : No data available
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

- Biodegradation>PRODUCT : Not classified
 - ABS resin : No data available
 - N,N'-ethylenedi(stearamide) : 15 (%) 28 day (), Source: IUCLID
 - Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

3) Bioaccumulative potential>PRODUCT : Not classified

- ABS resin : No data available
- N,N'-ethylenedi(stearamide) : No data available
- Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

4) Mobility in soil>PRODUCT : Not classified

- ABS resin : No data available
- N,N'-ethylenedi(stearamide) : No data available
- Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

5) Other adverse effects>PRODUCT : Not classified

- ABS resin : No data available
- N,N'-ethylenedi(stearamide) : No data available
- Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : No data available

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

- Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

2) Precautions (including disposal of contaminated container of package)

- Do not allow spill material to enter sewers, storm water drains, soil, etc.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

14. TRANSPORT INFORMATION

1) UN No. : Not applicable

2) Proper shipping name : Not applicable

3) Class or division : Not applicable

4) Packing group : Not applicable

5) Marine pollutant : Not applicable

6) Special safety response for transportation or transportation measure :

Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

- ADR

· Tunnel restriction code : Not applicable

- IMDG
 - Marine pollutant : Not applicable
- Air transport(IATA)
 - UN No. : Not applicable
 - Proper shipping name : Not applicable
 - Class or division : Not applicable
 - Packing group : Not applicable

15. REGULATORY INFORMATION

1) Occupational Safety and Health Act in Korea

Not applicable

2) Toxic Chemical Control Act in Korea

Not applicable

3) Safety Control of Dangerous Substances Act in Korea

PRODUCT : Class 4) (Designated quantity:6000ℓ)

4) Wastes Control Act in Korea

PRODUCT : Designated waste (Waste containing hazardous substances - Stabilization or solidification/solidification treatment)

-In case of disposal, it must be disposed of in accordance with Article 13 of the Waste Management Act.

5) Other regulations in KOREA and Abroad regulations

- Other regulations

Not applicable

Not applicable

- PERSISTENT ORGANIC POLLUTANTS CONTROL ACT

Not applicable

- Act on the registration and evaluation of chemicals PRODUCT : Existing Commercial Chemical Substances

- ABS resin : Existing Commercial Chemical Substances

- N,N'-ethylenedi(stearamide) : Existing Commercial Chemical Substances

- Methyl 2-methyl-2-propenoate polymer with ethenylbenzene and 2-propenenitrile : Existing Commercial Chemical Substances

16. OTHER INFORMATION

1) Reference

- CERl
- Directivw 87/302/EEC, GLP . IUCLID
- ECHA

- ECHA registration materials
- ECOTOX
- EU IUCLID
- IUCLID
- NCIS existing chemical safety testing
- OECD SIDS
- OECD SIDS, EU IUCLID
- OECD TG 301 C . OECD SIDS
- OECD TG404, OECD SIDS
- OECD TG423, Ministry of existing chemical safety testing (2001-2004)
- 고용노동부
- 환경부

2) Print date : 2022-01-11

3) Revision date

- Revised date count : 0
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- Last revised history :

4) Other