# **TECHNICAL DATA SHEET**

MSDS HIMACS Sheet | Material Safety Data Sheet

## **PRODUCT AND COMPANY INFORMATION**

Product Name: HIMACS
Company: LX HAUSYS Ltd.
Address: #98, Huam-ro, Jung-gu, Seoul, 04637, Republic of Korea
Telephone: +82 2 6930 1490
Fax: +82 2 6930 1355
Recommended use of the chemical and restrictions on use Recommended use : Artificial marble

Restrictions on use : It is inedible.

# HAZARDS IDENTIFICATION

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Physical hazard:Not applicable Health hazard : Not applicable Environment hazard : Not applicable

Label elements including precautionary statements

Symbol / Signal word : Not applicable Hazard statements : Not applicable Precautionary statements : Not applicable

## **NFPA Rating**

Health : 0 Flammability : 0 Reactivity : 0Water reactivity : 0

## COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No.	EINECS No.	Conc. %
Methyl Methacrylate	80-62-6 * from US NLM	.201-297-1 ** from ECHA	30% ~ 40%
Aluminum hydroxide oxide	24623-77-6	246-368-8	60% ~ 65%
Additives	-	-	1% ~ 2%

# FIRST AID MEASURES

### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### In case of skin contact

No data available

## If inhaled

If breathed in, move person into fresh air.

If not breathing, give artificial respiration. Consult a physician.

### If swallowed

Never give anything by mouth to an unconscious person.

Rinse mouth with water.

Consult a physician.

## Other medical attention.

Medical personnel should be aware of the protective measures of the substance.

#### Potential health effect

May be harmful if swallowed.

## **FIRE-FIGHTING MEASURES**

## **Flammable properties**

Flash point : No flash occurred under 93  $^{\circ}$  (Rapid equilibrium method) Burning rate : No combustion sustained at 20  $^{\circ}$  (UN TDG test & criteria - Test N1)

#### Suitable extinguishing media

Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide

## Specific hazards arising from the chemical

No data available

#### Special protective equipment for fire-fighters

Fire fighters should enter area wearing respiratory protection and protective equipment.

## **ACCIDENTIAL RELEASE MEASURES**

#### **Personal precautions**

Avoid breathing dust.

## **Environmental precautions**

No data available

## Methods and materials for containment and cleaning up

Pick up and arrange disposed materials without creating dust Keep in suitable, closed containers for disposal.

## HANDLING AND STORAGE

## Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Avoid breathing dust. Avoid contact with skin and eyes. Wash hands thoroughly after handling.

#### Conditions for safe storage

Keep in suitable, closed containers for disposal.

## **EXPOSURE CONTROL/PERSONAL PROTECTION**

**Components with workplace control parameter KOSHA :** No data available

**ACGIH :** No data available

Appropriate engineering controls : Ventilation

Personal protective equipment

**Respiratory protection :** General dust mask **Hand protection :** Protective gloves

**Eye protection :** Protective goggles

Skin and body protection : Working clothes

# PHYSICAL AND CHEMICAL PROPERTIES

State : Solid (Not powder) at 20 °C Appearance : Plate (Thickness : > 11 mm) pH :  $6.5 \sim 7.5$  at 20 °C  $\times$  Sample : H 2 O = 1 : 5 (V/V) Flash point : No flash occurred under 93 °C. (Rapid equilibrium method) Auto ignition temperature : No spontaneous combustion under 200 °C Water solubility : Water Insoluble at 20 °C

Relative density : 1.7 at 20 ℃

Flammability

Boiling point : No data available Vapour pressure : No data available Evaporation rate : No data available Decomposition temperature : No data available Partition coefficient (n-octanol / water) : No data available Viscosity : No data available Lower explosion limit / Upper explosion limit : No data available

# **STABILITY AND REACTIVITY**

## **Chemical stability**

Stable under recommended storage conditions.

Conditions to avoid

Avoid breathing dust.

## Materials to avoid

Strong acids

#### Hazardous decomposition products

Carbon oxides

## **TOXICOLOGICAL INFORMATION**

## Acute toxicity

Oral	rat	LD50 :	No data available	※ from US NLM / ECHA
Inhalation	rat	LC50 :	No data available	
Skin	rabbit	LD50 :	No data available	

Skin irritation : No data available Eye irritation : No data available Respiratory sensitization : No data available Skin sensitization : No data available Germ cell mutagenicity : No data available Carcinogenicity : Not classifiable  $\approx$  from CCRIS / IARC Reproductive toxicity : No data available Specific target organ toxicity - single exposure (GHS) : No data available Specific target organ toxicity - repeated exposure (GHS) : No data available Aspiration hazard : No data available

# **ECOLOGICAL INFORMATION**

## Toxicity

Fish	LC50 :	No data available	※ from US NLM / ECHA
Crustacean	EC50 :	No data available	
Algae	EC50 :	No data available	

Persistence and degradability : No data available Bio accumulative potential : No data available Mobility in soil : No data available Other adverse effects: No data available

# **DISPOSAL CONSIDERATIONS**

## **Disposal consideration**

Observe all environmental regulations.

## **Disposal precaution**

Keep in suitable, closed containers for disposal.

# TRANSPORT INFORMATIONS

UN TDG : Not dangerous goods IATA : Not dangerous goods IMDG : Not dangerous goods Marine pollution : Not applicable

## **Special precaution**

Fire EmS Guide : F-A (Recommendation) Spillage EmS Guide : Not dangerous goods

## **REGULATORY INFORMATION**

## Korea Industrial Safety and Health Act :

GHS : Not applicable Material(s) applied by workplace exposure limits : Not applicable Korea Hazardous Materials Safety Control Act : Not hazardous material

## Korea Chemicals Control Act :

Material(s) applied by toxic substances : Not applicable Material(s) applied by restricted and prohibited substances : Not applicable

## **OTHER INFORMATION**

**Issued Date:** 2019. 01. 22.

Revision No.: 3

## Revision Date : 2021. 07.07

## References

- GHS Classification : Korea MSDS Testing Lab Certificate (Report No. 2020-03-004116), US NLM
- Physical and chemical properties : Korea MSDS Testing Lab Certificate
- Transport information : Korea MSDS Testing Lab Certificate
- Toxic & ecological information : OECD SIDS, ECHA, US NLM, HSDB, IARC, CCRIS, JP NITE

## Acronyms and Websites

- ECHA : European chemical agency, http://echa.europa.eu/
- US NLM : U.S. National Library of Medicine, http://chem.sis.nlm.nih.gov/chemidplus/
- HSDB : US Hazardous Substances Data Bank, http://toxnet.nlm.nih.gov/
- CCRIS : US Chemical Carcinogenesis Research Information System, http://toxnet.nlm.nih.gov/
- IARC : International Agency for Research on Cancer, http://monographs.iarc.fr/
- JP NITE : Japan National Institute of Technology and Evaluation, http://www.safe.nite.go.jp/