

This report is to supersede report GZ1009105903/CHEM.

Client's Name : PT. HUMIGARD INDONESIA  
Client's Address : JALAN KEMBANG KENCANA A2 NO.2D, JAKARTA BARAT 11620 INDONESIA

SGS Ref No. : GZHG1009015134CO  
Product Name : HUMICO MOISTURE ABSORBER, DESICCANT  
End Uses : DESICCANT  
Composition/Ingredient : Calcium Chloride (55.0%); Modified Starch (30.0%); Natural Starch (15.0%)  
Job Receiving Date : SEP 13, 2010  
Preparation Period : SEP 13, 2010 TO SEP 16, 2010

### Service Requested

Safety Data Sheet for the Product

### SUMMARY

The contents and format of this SDS are in accordance with REGULATION (EC) No. 1907/2006 and REGULATION (EC) No. 1272/2008.

\*\*\*\*\*

Signed for and on behalf of  
SGS-CSTC Ltd.

  
\_\_\_\_\_  
Allen Xie  
Approved Signatory

This document is issued by the Company under its General Conditions of Service printed overleaf or available on request and accessible at [http://www.sgs.com/terms\\_and\\_conditions.html](http://www.sgs.com/terms_and_conditions.html). Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested. This document cannot be reproduced except in full, without prior approval of the Company.



SGS Standards Technical Services Co., Ltd.  
Guangzhou Scientific Testing Services Chemical Laboratory

198 Kexi Road, Sci-Tech Park, Guangzhou Economic & Technology Development District, Guangzhou, China 510863 | (86-20) 82155555 | (86-20) 82075125 | [www.cn.sgs.com](http://www.cn.sgs.com)  
中国·广州·经济技术开发区科学城科珠路198号 邮编: 510863 | (86-20) 82155555 | (86-20) 82075125 | [sgs.china@sgs.com](mailto:sgs.china@sgs.com)

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

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

- **1.1 Product identifier**
- **Trade name:** HUMICO MOISTURE ABSORBER, DESICCANT
- **Article number:** Not available
- **Registration number:** Not available
- **1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- **Application of the substance / the preparation:** DESICCANT
- **1.3 Details of the supplier of the safety data sheet**  
**PT. HUMIGARD INDONESIA**  
**JALAN KEMBANG KENCANA A2 NO.2D, JAKARTA BARAT 11620 INDONESIA**  
**TEL: +62 21 5890 7115**  
**FAX: +62 21 5890 7113**  
**E-mail: freist@humigard.com**
- **Only Representative / other EU contact point:**  
**Mr. Peter Holger Klarin**  
**TEL: +46 404 55189**  
**FAX: +46 404 58675**
- **Further information obtainable from:** PT. HUMIGARD INDONESIA
- **1.4 Emergency telephone number:** +62 816 1100 555
- **Reference Number:** GZHG1009015134CO; GZ1009105903A/CHEM

### 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Hazard description:**



Xi Irritant

- **Information concerning particular hazards for human and environment:**

The product has been classified as dangerous according to Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008.

R 36 Irritating to eyes.

- **Classification system:**

The classification is according to the latest edition of the Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008, and extended by company and literature data.

- **2.2 Label elements**

- **GHS label elements:**



Warning

3.3/2A - Causes serious eye irritation.

- **Prevention:**

Wash thoroughly after handling.

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

- **Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

- **2.3 Other hazards:** Not available

### 3 Composition/information on ingredients

- **3.1 Substance:** Not applicable. Please refer to 3.2 for more information.
- **3.2 Mixture:** Please view below

(Contd. on page 2)

OM

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

(Contd. of page 1)

**· Chemical characterization**

**· Description:**

Mixture of the substances listed below with nonhazardous additions.

For the wording of listed risk phrases refer to section 16.

**· Dangerous components:**

Calcium Chloride	 Xi; R 36 Warning: ! 3.3/2A	55,0%
------------------	--	-------

**· Non-dangerous components:**

Natural Starch	15,0%
Modified Starch	30,0%

**· Remark:**

*Note: For confidentiality of formula, some information of components is not listed in the above table. Any require, please contact manufacturer/supplier.*

**4 First aid measures**

**· 4.1 Description of first aid measures**

**· After inhalation:** Supply fresh air; consult doctor in case of complaints.

**· After skin contact:** Generally the product does not irritate the skin.

**· After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**· After swallowing:** If symptoms persist consult doctor.

**· Information for doctor:**

**· The following symptoms may occur:** Not available

**· Hazards** Not available

**· Treatment** Not available

**· 4.2 Most important symptoms and effects, both acute and delayed:** Not available

**· 4.3 Indication of any immediate medical attention and special treatment needed:** Not available

**5 Firefighting measures**

**· 5.1 Extinguishing media**

**· Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

**· 5.2 Special hazards arising from the substance or mixture:** Not available

**· Protective equipment:** No special measures required.

**· 5.3 Advice for firefighters:** Not available

**6 Accidental release measures**

**· 6.1 Personal precautions, protective equipment and emergency procedures:** Not required.

**· 6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

**· 6.3 Methods and material for containment and cleaning up:** Pick up mechanically.

**· 6.4 Reference to other sections:** Please view below.

**7 Handling and storage**

**· 7.1 Precautions for safe handling:** Prevent formation of dust.

**· Information about fire - and explosion protection:** No special measures required.

**· 7.2 Conditions for safe storage, including any incompatibilities:**

**· Requirements to be met by storerooms and receptacles:** No special requirements.

(Contd. on page 3)

OM

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Incompatibilities:** Not available
- **7.3 Specific end use(s):** Not available

(Contd. of page 2)

**8 Exposure controls/personal protection**

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:**

**Modified Starch**

WEL (Great Britain)	10*4** mg/m <sup>3</sup>
	*total inhalable **respirable

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls:** Not available

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

**9 Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**

·

(Contd. on page 4)

OM

**Safety Data Sheet**  
Regulation No. 1907/2006, 1272/2008

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

(Contd. of page 3)

· <b>Form:</b>	Coarse
· <b>Colour:</b>	White
· <b>Odour:</b>	NIL
· <b>Change in condition</b>	
· <b>Melting point/Melting range:</b>	Not available
· <b>Boiling point/Boiling range:</b>	Not available
· <b>Freezing point:</b>	Not available
· <b>Flash point:</b>	Not available
· <b>Flammability (solid, gaseous):</b>	Not available
· <b>Ignition temperature:</b>	Not available
· <b>Decomposition temperature:</b>	Not available
· <b>Self-igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not available
· <b>Upper:</b>	Not available
· <b>Oxidizing properties</b>	Not available
· <b>Density:</b>	Not available
· <b>Relative density</b>	Not available
· <b>Vapour density</b>	Not available
· <b>Evaporation rate</b>	Not available
· <b>Solubility in / Miscibility with water:</b>	Not available
· <b>pH-value:</b>	Not available
· <b>Partition coefficient (n-octanol/water):</b>	Not available
· <b>Segregation coefficient (n-octanol/water):</b>	Not available
· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not available.
· <b>9.2 Other information:</b>	Not available

## 10 Stability and reactivity

- **10.1 Reactivity:** No decomposition if used according to specifications.
- **10.2 Chemical stability:** Not available
- **10.3 Possibility of hazardous reactions:** Not available
- **10.4 Conditions to avoid:** Not available
- **10.5 Incompatible materials:** Not available
- **Materials to be avoided:** Not available
- **Dangerous reactions:** No dangerous reactions known.
- **10.6 Hazardous decomposition products:** Not available

## 11 Toxicological information

- **11.1 Information on toxicological effects**

(Contd. on page 5)

OM

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

(Contd. of page 4)

**· Acute toxicity**

**· LD/LC50 values relevant for classification:**

**Calcium Chloride**

Oral	LD50	1000 mg/kg (rat)
------	------	------------------

**· Primary irritant effect**

**· on the skin:** No irritant effect.

**· on the eye:** Irritating effect.

**· Sensitization:** No sensitizing effects known.

**· Additional toxicological information:**

*The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:*

**Irritant**

**· Toxicokinetics, metabolism and distribution:** Not available

**· Acute effects (acute toxicity, irritation and corrosivity):** Not available

**· Repeated dose toxicity:** Not available

**· CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):** Not available

**12 Ecological information**

**· 12.1 Toxicity:** Not available

**· 12.2 Persistence and degradability:** Not available

**· 12.3 Bioaccumulative potential:** Not available

**· 12.4 Mobility in soil:** Not available

**· 12.5 Results of PBT and vPvB assessment:** Not available

**· 12.6 Other adverse effects:** Not available

**· Additional ecological information:**

**· General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

*Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*

**13 Disposal considerations**

**· 13.1 Waste treatment methods**

**· Product**

**· Recommendation:**

*Must not be disposed together with household garbage. Do not allow product to reach sewage system.*

**· Uncleaned packaging**

**· Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

**· 14.1 Land transport ADR/RID (cross-border)**

**· 14.1.1 ADR/RID class:** -

**· Danger code (Kemler):** -

**· 14.1.2 UN-Number:** -

**· 14.1.3 Packaging group:** -

**· 14.1.4 Description of goods:** -

**· Limited quantities (LQ):** -

**· Transport category:** -

**· 14.2 Maritime transport IMDG**

**· 14.2.1 IMDG Class:** -

(Contd. on page 6)

OM

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

(Contd. of page 5)

- **14.2.2 UN Number:** -
- **Label:** -
- **14.2.3 Packaging group:** -
- **EMS Number:** -
- **Marine pollutant:** No
- **Segregation groups** -
- **14.2.4 Proper shipping name:** -
  
- **14.3 Air transport ICAO-TI and IATA-DGR**
- **14.3.1 ICAO/IATA Class:** -
- **14.3.2 UN/ID Number:** -
- **Label:** -
- **14.3.3 Packaging group:** -
- **14.3.4 Proper shipping name:** -
  
- **UN "Model Regulation":** -
- **14.4 Environmental hazards:** Not available
- **14.5 Special precautions for users:** Not available
- **14.6 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not available

## 15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 335(extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313(specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA(Toxic Substances Control Act):**

Calcium Chloride

Modified Starch

- **Proposition 65**

- **Chemical known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Cancerogenity categories**

- **EPA(Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC(International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP(National toxicology Program)**

None of the ingredients is listed.

- **TLV(Threshold Limit Value established by ACGIH)**

Modified Starch

- **MAK(German Maximum Workplace Concentration)**

None of the ingredients is listed.

(Contd. on page 7)

OM

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

(Contd. of page 6)

**· NIOSH-Ca(National Institution for Occupational Safety & Health )**

None of the ingredients is listed.

**· OSHA-Ca(Occupational Safety & Health Administration)**

None of the ingredients is listed.

**· Labelling according to EU guidelines:**

The product has been classified as dangerous according to Directive 67/548/EEC, 1999/45/EC and Regulation (EC) No. 1272/2008.

**· Code letter and hazard designation of product:**



*Xi Irritant*

**· Risk phrases:**

36 Irritating to eyes.

**· Safety phrases:**

2 Keep out of the reach of children.

22 Do not breathe dust.

46 If swallowed, seek medical advice immediately and show this container or label.

56 Dispose of this material and its container to hazardous or special waste collection point.

**· National regulations**

**· Candidate List of Substances of very high concern (SVHC) according to ECHA (18/06/2010)**

None of the ingredients is listed

**· REACH Regulation Annex XVII Restriction List** None of the ingredients is listed

**· REACH Regulation Annex XIV Authorization Recommendation List** None of the ingredients is listed

**· 15.2 Chemical safety assessment:** Not available

**16 Other information**

\*\*\*\*\*  
The contents and format of this MSDS/SDS are in accordance with REGULATION(EC) No. 1272/2008, (EC) No. 1907/2006, EU Commission Directive 1999/45/EC, 67/548/EEC.

**DISCLAIMER OF LIABILITY**

The information in this MSDS/SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in anyway connected with the handling, storage, use or disposal of the product. This MSDS/SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS/SDS information may not be applicable.

**· Relevant R-phrases**

36 Irritating to eyes.

**· Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Contd. on page 8)

OM

**Safety Data Sheet**  
**Regulation No. 1907/2006, 1272/2008**

Printing date 29.09.2010

Revision: 16.09.2010

**Trade name: HUMICO MOISTURE ABSORBER, DESICCANT**

(Contd. of page 7)

. \*\*\*\*

*End of report*

OM