HEALTH AND SAFETY DATA SHEET

01 - IDENTIFICATION OF THE SUBTANCE AND THE COMPANY

1.1	Product Name :	HIDE GLUE Clue Code # HG31503/55
1.2	Company :	Hellmann GmbH Martinstrasse 18
		87700 Memmingen
1.3	Contact :	Mr. Jörg Hellmann TEL : +49 (0)8331 - 49 95 95 FAX : + 49 (0)8331 - 49 95 96

02 - COMPOSITION

• Description: Light brown or brown granules or powder. The main ingredients is glutine. Glutine is a protein which belongs to the scleroproteins. It also contains unobjectionable additives in very small concentrations.

e-mail: info@hellmann-leim.de

• Hazardous ingredients: None.

03 – POTENTIAL HAZARDS

• No special hazards for human beings or the environment.

04 - FIRST AID MEASURES

- After inhalation: If used according to directions, there will be no development of harmful fumes.
- After skin contact without burning (scalding): For hygienic reasons, we recommend washing the affected area with water and soap. In the case of a burn proceed as when treating a burn caused by harmless fluids.
- After eye contact: Wash with water. Consult medical practitioner.
- After swallowing: Ingestion of large amounts can cause health trouble. Consult medical practitioner!
- Directions for the medical practitioner: The main ingredients are readily digestible or inert.

05 - FIRE-FIGHTING MEASURE

- Directions: The preparation has self-extinguishing properties and does not pose a fire hazard. Use fire fighting measures according to the surroundings.
- Suitable fire extinguishing substances: See directions.
- Fire extinguishing substances that are not suitable for safety reasons: See directions.
- Special risks associated with the preparation, it is combustion products or gas emissions: Not known.

Updated on: 01.20.2011

• Special protection equipment for fire fighting: See directions

06 - ACCIDENTAL RELEASE MEASURES

- Personal precautionary measures: The solid preparation does not pose any handling hazards in the delivery state and at ambient temperature. However it is intended for use in water-based preparation at 60°.
- Environmental protection measures: The preparation is solid at ambient temperatures. In this state no special environmental protection measures have to be taken.
- Measures for cleaning and removal: The preparation may be sweeped up mechanically.
- Additional directions: The preparation shows moisture expansion in cold water. In warm water (>35°C) it dissolves. It readily degrades in adapted biological purification plants.

07 - HANDLING AND STORAGE

- Directions for safe handling: No special directions.
- Directions for fire and explosion protection: No fire or explosion hazard.
- Requirements for storage rooms and containers: Store in a cool and dry place for best storage stability.
- Directions for joint storage: No special directions.
- Further directions for storage conditions: No further directions.
- Storage classification: No hazardous material.

08 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- Additional directions for the design of technical plant: None
- Ingredients subject to workplace-specific limit value: None
- General protection and hygienic measures: None
- Protection against inhalation: Use of dust respirator is recommended when dust develops.
- Protection of hands: Use of protective gloves, for example thermally insulated rubber gloves, is recommended when directly handling the preparation in the molten water-based preparation.
- Protection of eyes: Use of protective goggles is recommended when directly handling the preparation in the molten water-based preparation.
- Protection of body: No special protection of body required.

09 - PHYSICAL AND CHEMICAL PROPERTIES

- Consistency: Granules or coarse powder
- Colour: Ligth brown to brown

• Smell: Typical/mild

Updated on: 01.20.2011

Safety data:

- Change of state solid/fluid: Carbonisation at temperatures > 200 C
- Flash point: Not applicable
- Inflammability: Not applicable (self-extinguishing)
- Ignition point: >200°C
- Spontaneous Ignition: None
- Fire propagating properties: None
- Explosion hazard: None
- Explosibility limit: Not applicable
- Vapour pressure at 20°C: Not established
- Density at 20° C: Approximately 0,5 0,8 g/cm³
- Solubility in water: Unlimited miscibility. (Insoluble in organic solvents and grease)
- PH-Value at 60° C in 12,5% solution: 5,5 7,5
- Distribution coefficient n-octanol/water: Not known
- Viscosity: Solid material
- Solvent separation test: Not applicable (No organic solvent content)
- Solvent content: 0%
- Other information: None

10 - STABILITY and REACTIVITY

- Conditions to be avoided: Long-term exposure to temperatures above 65° C will lead to thermal degradation of the glutine molecule without dangerous reactions in the water-based preparation.
- Materials to be avoided: Not known
- Hazardous decomposition products: Not known
- Other information: Heating up to 200 300 °C will cause carbonization and puff-up of the preparation. After removing the heating source the preparation shows self-extinguishing properties.

11 - TOXICOLOGICAL INFORMATION

- Acute toxicity: No ingredients with compulsory identification.
- Subacute to chronic toxicity: No research results.

- Experiences in terms of human toxicology: No negative experiences.
- Other information: None

12 - ECOLOGICAL INFORMATION

- Valuation text: According to our experience completely biodegradable.
- Other information: None
- AOX-related directions: Contains negligibly small amounts of halogen-organic compounds.
- Formulations contain neither heavy metals nor heavy metal compounds, and comply with EN 71-3 (Safety of toys, Part 3: Migration of specific elements).
- General directions: None

13 - DISPOSAL CONSIDERATIONS

Product:

- Direction: The preparation is degradable and compostable, washing water may be discharged to communal purification plant.
- Waste code number under European Catalog of Wastes: 080403

Wastes of water-miscible adhesives and packing compound (not subject to monitoring).

Uncleaned packaging:

- Material is removable from bags without any residues.
- Recommended cleaning agent: Not necessary.

14 - TRANSPORT INFORMATION

• No hazardous goods.

15 - Regulations

- No compulsory identification under EC directives and national regulations.
- Classification: Water-hazard rating 1 (Self-classification).

16 - OTHER INFORMATION/BIBLIOGRAPHIC REFERENCES

• This information is based on our present knowledge. However it is not to be understood as a legally binding assurance of product properties.