

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name JAGUAR HP 105
- CAS-No. 39421-75-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses of the Substance/Mixture

- Thickener for cosmetic formulations

1.3 Details of the supplier of the safety data sheet

Company

Solvay USA Inc.,
NOVECARE
504 Carnegie Center
Princeton, NJ, 08540, US
Telephone Number: 800-973-7873

E-mail address

manager.sds@solvay.com

1.4 Emergency telephone number

+86 512 8090 3042 [CareChem 24]
China (Domestic Only): +86 532 8388 9090 (Qingdao)
MULTI LINGUAL EMERGENCY NUMBER (24/7)
Europe/Latin America/Africa : +44 1235 239 670 (UK)
Middle East/Africa speaking Arabic : +44 1235 239 671 (UK)
Asia Pacific : +65 3158 1074 (Singapore)
China : +86 512 8090 3042
North America : +1 800 424 9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

<u>Appearance</u>	<u>Form:</u>	Fine powder
	<u>Physical state:</u>	solid (25 °C)
	<u>Colour:</u>	creamy white.
	<u>Odour</u>	bean like

GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)

- Not classified as hazardous product under the regulation above.

2.2 Label elements

GHS Classification and Labeling: Follow GB 13690, GB 15258 and GB 30000.2 to GB 30000.29 (GHS 2011)

- Not required to be labelled under the local regulation including regulation above.

2.3 Other hazards which do not result in classification

- Divided solid.

- Combustible solid.
- Exposure to dust generated during the handling or use of the product may cause temporary mechanical irritation to the eyes, skin and respiratory tract.
- Finely divided particles may form explosive mixtures in air.
- Electrostatic charges may be generated as a result of flow, stirring, etc.
- Electrostatic charges may build up by swirling, pneumatic transport, pouring, etc.

SECTION 3: Composition/information on ingredients

3.1 Substance

- Chemical nature GUAR GUM ,2-HYDROXYPROPYL ETHER

Remarks

- Contains no hazardous ingredients according to GHS

3.2 Mixture

- Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

- First aider needs to protect himself.
- Show this safety data sheet to the doctor in attendance.
- Place affected clothing in a sealed bag for subsequent decontamination.
- When symptoms persist or in all cases of doubt seek medical advice.

In case of inhalation

- Move to fresh air.
- Keep at rest.
- Consult a physician if necessary.

In case of skin contact

- Take off contaminated clothing and shoes immediately.
- Wash off immediately with soap and plenty of water.
- Use a mild soap if available.
- If skin irritation occurs, seek medical advice/attention.

In case of eye contact

- Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If eye irritation persists, consult a physician

In case of ingestion

- Do not induce vomiting without medical advice.
- Rinse mouth with water.
- Do not give anything to drink.
- Keep at rest.
- Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

- no data available

4.3 Indication of any immediate medical attention and special treatment needed

- no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

- Multi-purpose powders
- Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)
- Water mist

Unsuitable extinguishing media

- Do not use a solid water stream as it may scatter and spread fire.
- High pressure inert gas, e.g. carbon dioxide jet.
- (Avoid dispersal of dust in the air)

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting

- Risk of dust explosion.
- Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- The pressure in sealed containers can increase under the influence of heat.
- Hazardous decomposition products formed under fire conditions.
- High concentrations of toxic or harmful products may remain in the residual liquid once the fire has been extinguished.

Hazardous combustion products:

- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

5.3 Advice for firefighters

Special protective equipment for firefighters

- Wear full protective clothing and self-contained breathing apparatus.
- Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Specific fire fighting methods

- Stay upwind.
- Fight fire remotely due to the risk of explosion.
- Do not use a solid water stream as it may scatter and spread fire.
- Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is NO direct contact between the water and the product.
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information

- Evacuate personnel to safe areas.
- Avoid dust formation.
- Intervention only by capable personnel who are trained and aware of the hazards of the product.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.

- Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid inhalation, ingestion and contact with skin and eyes.
- Wear chemical resistant personal protective equipment
- Wear suitable gloves.
- Wear suitable protective clothing.
- Respiratory protection
- Wear as appropriate:
 - Face-shield
 - Tightly fitting safety goggles
- In the case of dust or aerosol formation use respirator with an approved filter.
- In the case of vapour formation use a respirator with an approved filter.
- Eliminate all ignition sources if safe to do so.
- Stop leak if safe to do so.
- For further information refer to section 8 "Exposure controls/personal protection".

6.2 Environmental precautions

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by bunding.
- The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and materials for containment and cleaning up

- No sparking tools should be used.
- Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
- Stop leak if safe to do so.
- Dam up with sand or inert earth (do not use combustible materials).
- Shovel or sweep up.
- Keep in suitable, closed containers for disposal.
- Never return spills in original containers for re-use.
- Wash non-recoverable remainder with large amounts of water.
- Clean contaminated surface thoroughly.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.
- Dispose of in accordance with local regulations.

Additional advice

- No conditions to be specially mentioned.

6.4 Reference to other sections

- 7. HANDLING AND STORAGE

- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.
- The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
- Use explosion-proof electrical/ ventilating/ lighting equipment.
- Take precautionary measures against static discharges.
- Ground/bond container and receiving equipment.
- To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded.
- Ensure all equipment is electrically grounded before beginning transfer operations.
- Use only non-sparking tools.
- Wear personal protective equipment.
- Wear suitable protective clothing.
- Avoid inhalation, ingestion and contact with skin and eyes.
- Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
- Provide for appropriate exhaust ventilation and dust collection at machinery.
- Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
- For personal protection see section 8.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions

- Take appropriate measures to prevent static discharges, which may include thorough electrical interconnecting, grounding of equipment, and/or conveyance under inert gas.
- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Keep containers tightly closed in a dry, cool and well-ventilated place.
- Keep away from open flames, hot surfaces and sources of ignition.
- Keep away from incompatible materials to be indicated by the manufacturer
- Keep away from: Hazardous reactions may occur on contact with certain chemicals. (Refer to the list of incompatible materials section 10: "Stability-Reactivity").

Packaging material

Suitable material

- Water-resistant materials.

7.3 Specific end use(s)

- no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- Contains no substances with occupational exposure limit values above their regulatory reporting threshold.

8.2 Exposure controls

Control measures

Engineering measures

- Effective exhaust ventilation system
- Ensure adequate ventilation.
- Extract at emission point.
- Ensure that extracted air cannot be returned to the workplace through the ventilation system.
- Facilities and equipment easily cleanable.
- Dust must be extracted directly at the point of origin.
- Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).
- Avoid dust formation.

Individual protection measures

Respiratory protection

- This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation.
- Respirator must be worn if exposed to dust.
- Recommended Filter type: Particulates type

Hand protection

- Where there is a risk of contact with hands, use appropriate gloves
- Gloves must be inspected prior to use.
- Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

- Use only personal protective equipment that conforms to international/ national standards (KOSHA, etc.).

Suitable material

- Neoprene
- Nitrile rubber
- butyl-rubber
- PVC

Eye protection

- Tightly fitting safety goggles
- Face-shield

Skin and body protection

- Wear fire resistant and antistatic coveralls
- Workers should wear antistatic footwear.
- Full protective suit
- Footwear protecting against chemicals
- Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

- Handle in accordance with good industrial hygiene and safety practice.
- Use clean, well-maintained personal protection equipment.
- Regular cleaning of equipment, work area and clothing.
- When using do not eat, drink or smoke.
- Smoking, eating and drinking should be prohibited in the application area.
- Wash hands before breaks and immediately after handling the product.
- Contaminated work clothing should not be allowed out of the workplace.
- The user is responsible for monitoring the working environment in accordance with local laws and regulations.

Protective measures

- Emergency equipment immediately accessible, with instructions for use.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards and/or risks that may occur during use.
- The protective equipment must be selected in accordance with current local regulations and in cooperation with the supplier of the protective equipment.

Environmental exposure controls

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Prevent further leakage or spillage if safe to do so.
- Contain the spilled material by bunding.
- The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	<u>Form:</u> Fine powder <u>Physical state:</u> solid (25 °C) <u>Colour:</u> creamy white.
<u>Odour</u>	bean like
<u>Odour Threshold</u>	No data available
<u>pH</u>	9.0 - 11.0 (1 %) Aqueous solution
<u>Melting point/freezing point</u>	<u>Melting point/range:</u> 140 °C <u>Decomposition:</u> yes
<u>Initial boiling point and boiling range</u>	No data available
<u>Flash point</u>	Not applicable solid for which the melting point is > 100 °C
<u>Evaporation rate (Butylacetate = 1)</u>	No data available
<u>Flammability (solid, gas)</u>	May form combustible dust concentrations in air
<u>Flammability/Explosive limit</u>	No data available
<u>Auto-ignition temperature</u>	No data available
<u>Vapour pressure</u>	No data available
<u>Vapour density</u>	No data available
<u>Density</u>	<u>Bulk density:</u> 700 kg/m3 loose
<u>Relative density</u>	No data available
<u>Solubility</u>	<u>Water solubility:</u> soluble <u>Solubility in other solvents:</u> non-polar solvents : insoluble
<u>Partition coefficient: n-octanol/water</u>	No data available
<u>Decomposition temperature</u>	No data available
<u>Viscosity</u>	No data available
<u>Explosive properties</u>	No data available
<u>Oxidizing properties</u>	Not considered as oxidizing, Structure-activity relationship (SAR)

9.2 Other information

<u>Dust explosion constant</u>	81 m.bar/s Maximum Pressure: 6.7 bar
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Minimum ignition energy

> 500 mJ

Method: modified Hartmann tube - MIKE 3

SECTION 10: Stability and reactivity

10.1 Reactivity

- Stable at normal ambient temperature and pressure.

10.2 Chemical stability

- Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

- Under certain conditions, small dust-particles from the product may form flammable and explosive mixtures with the air.

10.4 Conditions to avoid

- Avoid dust formation.
- Prevent the build-up of electrostatic charge.
- Keep away from open flames, hot surfaces and sources of ignition.
- Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

- Strong oxidizing agents
- hot strong concentrated acids.

10.6 Hazardous decomposition products

- On combustion or on thermal decomposition (pyrolysis) releases:
- Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Guar gum, 2-hydroxypropyl ether

LD50 : > 10,000 mg/kg - Rat , male and female
Not classified as hazardous for acute oral toxicity according to GHS.
Gavage
No mortality observed at this dose.
Unpublished internal reports

Acute inhalation toxicity

Guar gum, 2-hydroxypropyl ether

- 4 h (dust/mist) : - Rat , male and female
An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Unpublished internal reports
Dust

Acute dermal toxicity

Guar gum, 2-hydroxypropyl ether

No data available

Acute toxicity (other routes of administration)

Guar gum, 2-hydroxypropyl ether

No data available

Skin corrosion/irritation

Guar gum, 2-hydroxypropyl ether

Rabbit
Not classified as irritating to skin
Method: Expert judgement
Semiocclusive
Unpublished internal reports

Serious eye damage/eye irritation

Guar gum, 2-hydroxypropyl ether

Rabbit
Not classified as irritating to eyes
Method: Expert judgement
Product dust may be irritating to eyes, skin and respiratory system.
Unpublished internal reports

Respiratory or skin sensitisation

Guar gum, 2-hydroxypropyl ether

Buehler Test - Guinea pig
Does not cause skin sensitisation.
Guar gum has been associated with cases of respiratory allergies in some susceptible individuals, as reported in the literature, or may exacerbate an existing allergic condition. However, no cases of respiratory sensitisation have been observed with the manufacture or use of the derivatised guar.
Unpublished internal reports

Mutagenicity

Genotoxicity in vitro

Guar gum, 2-hydroxypropyl ether

Ames test
with and without metabolic activation

negative
Unpublished internal reports

Genotoxicity in vivo

Guar gum, 2-hydroxypropyl ether

No data available

Carcinogenicity

Guar gum, 2-hydroxypropyl ether

No data available

Toxicity for reproduction and development

Toxicity to reproduction/Fertility

Guar gum, 2-hydroxypropyl ether

No data available

Developmental Toxicity/Teratogenicity

Guar gum, 2-hydroxypropyl ether

No data available

STOT

STOT - single exposure

Guar gum, 2-hydroxypropyl ether

Exposure routes: Ingestion, Inhalation
The substance or mixture is not classified as specific target organ toxicant, single exposure according to GHS criteria.
internal evaluation

STOT - repeated exposure

Guar gum, 2-hydroxypropyl ether

No data available

Experience with human exposure

No data available

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish

Guar gum, 2-hydroxypropyl ether

LC50 - 96 h : 100 mg/l - *Oncorhynchus mykiss* (rainbow trout)
semi-static test

Method: according to a standardised method
Freshwater species
Expert judgement and weight of evidence determination.
Unpublished internal reports

LC50 - 96 h : 100 mg/l - *Lepomis macrochirus* (Bluegill sunfish)
static test

Method: according to a standardised method
Freshwater species
Expert judgement and weight of evidence determination.
Unpublished internal reports

LC50 - 96 h : 1,000 mg/l - *Cyprinodon variegatus* (sheepshead minnow)
static test

Method: according to a standardised method
Marine species
Unpublished internal reports

Not harmful to fish (LC/LL50 > 100 mg/L)

Acute toxicity to daphnia and other aquatic invertebrates

Guar gum, 2-hydroxypropyl ether

EC50 - 48 h : > 1,000 mg/l - *Daphnia magna* (Water flea)
static test

Method: according to a standardised method
Freshwater species
Unpublished internal reports

LC50 - 96 h : 609 mg/l - *Mysidopsis bahia* (opossum shrimp)
static test

Method: according to a standardised method
Marine species
Unpublished internal reports

Not harmful to aquatic invertebrates. (EC/EL50 > 100 mg/L)

Toxicity to aquatic plants

Guar gum, 2-hydroxypropyl ether

ErC50 - 96 h : > 1,000 mg/l - *Selenastrum capricornutum* (green algae)
Freshwater species
Unpublished internal reports

ErC50 - 96 h : 314 mg/l - *Selenastrum capricornutum* (green algae)
Marine species
Unpublished internal reports

Not harmful to algae (EC/EL50 > 100 mg/L)

Toxicity to microorganisms No data available

Chronic toxicity to fish
Guar gum, 2-hydroxypropyl ether No data available

Chronic toxicity to daphnia and other aquatic invertebrates
Guar gum, 2-hydroxypropyl ether No data available

12.2 Persistence and degradability

Abiotic degradation No data available

Physical- and photo-chemical elimination No data available

Biodegradation

Biodegradability
Guar gum, 2-hydroxypropyl ether

Ready biodegradability study:
Method: OECD Test Guideline 301 B
23 % - 28 Days
The substance does not fulfill the criteria for ready biodegradability and ultimate aerobic biodegradability
Theoretical carbon dioxide production
Inoculum: activated sludge
Unpublished internal reports

Inherent biodegradability study
Method: OECD Test Guideline 302 B
66 % - 28 Days
The substance fulfills the criteria for inherent primary biodegradability
Dissolved organic carbon (DOC)
Inoculum: activated sludge
Unpublished internal reports

Degradability assessment
Guar gum, 2-hydroxypropyl ether The product is not considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water No data available

Bioconcentration factor (BCF)
Guar gum, 2-hydroxypropyl ether Not potentially bioaccumulable
Expert judgement

12.4 Mobility in soil

Adsorption potential (Koc) No data available

Known distribution to environmental compartments No data available

12.5 Results of PBT and vPvB assessment

Guar gum, 2-hydroxypropyl ether This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Ecotoxicity assessment

Short-term (acute) aquatic hazard

Guar gum, 2-hydroxypropyl ether Not harmful to aquatic life (LC/LL50, EC/EL50 > 100 mg/L)

Long-term (chronic) aquatic hazard

Guar gum, 2-hydroxypropyl ether Not classified due to data which are conclusive although insufficient for classification.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Prohibition

- Do not discharge directly into the environment.
- Dispose of in accordance with local regulations.

Advice on cleaning and disposal of packaging

Prohibition

- Do NOT dispose of untreated packaging with industrial waste.
- Do not dispose of with domestic refuse.
- Empty remaining contents.
- Clean using steam.
- Monitor the residual vapours.
- Dispose of rinse water in accordance with local and national regulations.
- Containers that cannot be cleaned must be treated as waste.
- Dispose of contents/ container to an approved waste disposal plant.
- Dispose of in accordance with local regulations.
- Where possible recycling is preferred to disposal or incineration.
- The recycled material must be completely dry and free of pollutants.

SECTION 14: Transport information

CN DG

not regulated

IMDG

not regulated

IATA

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transport regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

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

Following last version of regulations are applicable for the chemical classification, SDS and label:

- General Rule for classification and hazard communication of chemicals, GB 13690
- Series standards of Safety rules for classification, precautionary labeling and precautionary statements of chemicals, GB 30000.2~GB 30000.29
- General rules for preparation of precautionary label for chemicals, GB 15258
- Safety data sheet for chemical products—Content and order of sections, GB/T 16483
- Decree No. 591 of the State Council of the People's Republic of China: Regulations on the Control over Safety of Hazardous Chemicals
- List of dangerous goods GB12268
- Classification and code of dangerous goods GB6944

Notification status

Inventory Information	Status
United States TSCA Inventory	- All substances listed as active on the TSCA inventory
Canadian Domestic Substances List (DSL)	- Listed on Inventory
Australia Inventory of Chemical Substances (AICS)	- Listed on Inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	- Listed on Inventory
Korea. Korean Existing Chemicals Inventory (KECI)	- Listed on Inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	- Listed on Inventory
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	- Listed on Inventory
Taiwan Chemical Substance Inventory (TCSI)	- Listed on Inventory
New Zealand. Inventory of Chemical Substances	- All components are listed on the NZIOC inventory. The HSNO status of the product has not been assessed.
EU. European Registration, Evaluation, Authorisation and Restriction of Chemical (REACH)	- When purchased from a Solvay legal entity based in the EEA ("European Economic Area"), this product is compliant with the registration provisions of the REACH Regulation (EC) No. 1907/2006 as all its components are either excluded, exempt, and/or registered. When purchased from a legal entity outside of the EEA, please contact your local representative for additional information.

SECTION 16: Other information

Further information

- This sheet was updated (refer to the date at the top of this page). Subheadings and text which have been modified since the previous version are indicated with two vertical bars.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in any other manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.