1. IDENTIFICATION

1.1 Product name: Volgamid® B1HG8

1.2 Recommended use: Polymers industry

1.3 Safety data sheet suppliers: KuibyshevAzot PJC
Novozavodskaya str. 6, 445007 Togliatti, Samara region, Russian Federation
Phone number: +7 (8482) 561102
E-mail address: ep@kuazot.ru
Web site: www.kuazot.ru

1.4 Emergency telephone number: +7 (8482) 561030

2. HAZARDS IDENTIFICATION

2.1 Classification of the product: Mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]: The product has no any hazardous classification as defined in Regulation (EC) 1272/2008.

NOTES: Hazard of slipping on split product. Heated material can cause thermal burns. Electrostatic charging can occur during unloading or processing of this material. If necessary, take precautionary measures against static discharges. The likelihood of adverse health effects arising from normal use of the product is considered very low. Appropriate precautions should be taken if the product is subjected to secondary processing. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Dust may cause mechanical irritation.

2.2 Label elements:
Signal word: No need.
Hazard statements: Not found.
Supplemental label elements: Not applicable.
Precautionary statements: Not applicable.

2.3 Other known hazards:
Hazards without classification: When heated, turns into melt form and can cause thermal burns.

3. Composition/information on ingredients

3.1 Chemical description: Polyamide 6 (PA 6): CAS no. 25038-54-4
Glass, oxide, chemicals: CAS no. 659997-17-3
If the color of the product is black, the product may contain up to 1% carbon black.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

NOTES: The components of this product are embedded in an impervious polymer matrix and are therefore not biologically available. Any hazardous constituents are fixed in the polymer matrix and therefore present a negligible exposure risk under normal conditions of processing and handling. Additives contained in this product do not pose a risk to health unless they are liberated during processing (fumes from melting, dusts). Suitable Industrial Hygiene precautions should be implemented to prevent (respirable) dust and fume exposures. Exposure to (melting) fumes should be kept as low as possible, using suitable ventilation equipment. Dusts and fumes created from secondary processing may be irritating to respiratory tract and skin and should be considered as potentially hazardous. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

4. FIRST AID MEASURES

4.1 Description of first aid measures:
General advice: Avoid contact with the skin, eyes and clothing. Remove contaminated clothing.

If in eyes: As soon as possible flush eyes with a lot of water. Make sure there is no material hidden under eyelids. If victim wear contact lenses, remove them. Any further negative symptoms should be checked by doctor.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

If on skin: If melted material get on skin, immediately flush with water. Take off damaged clothing. If clothing melted into skin, do not touch it and get medical support.

If swallowed: Rinse mouth. Take victim to breathing comfortable position. Avoid vomiting, before medical support.
5. FIREFIGHTING MEASURES

5.1 Extinguishing media:
Suitable extinguishing media: water spray, foam, dry powder, carbon dioxide.

5.2 Hazards occur, when fire:
Substances: When burn, material decompose to: carbon monoxide, carbon dioxide, aldehydes, organic acids, nitrogen oxides, ammonia, amines, hydrogen cyanide.

5.3 Recommendations for fire brigade:
Avoid contact with burning and melted material, breathing with smoke. For firefighters personal protection use self-contained breathing apparatus. To ensure basic protection level, protection should conforms to EN 469.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions:
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up:
Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.
Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:
Protective measures: Use with adequate ventilation. Local exhaust ventilation should be provided. Avoid creating dusty conditions and prevent wind dispersal. Take measures against static discharge. Keep away from sources of ignition.
Recommendation: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities:
Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in original container, protected from direct sunlight. Never stack pallets more than two high to prevent the risk of them falling over. Big Bags may not be stacked. Pallets should not be stacked along the aisles. In case the material is delivered in bulk silo, the silo can contain 0.5 bar dry air at maximum. Relief pressure via vent line. Never use the manlid for pressure relief.

7.3 Specific end use(s):
Recommendations: Not available.
Industrial sector specific solutions: Not available.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:
Product/ingredient name: There are no known exposure limit values.

8.2 Exposure control:
Engineering control: Proper ventilation should be sufficient to control worker exposure to airborne contaminants.
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection: Safety glasses with side shields. When handling hot material, wear heat-resistant protective gloves, clothing and face shield that are able to withstand the temperature of the molten product.
Hand protection: Wear suitable gloves. When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.
Skin and body: Working clothes.
Respiratory protection: No special protection is required. In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

NOTES: If the color of the product is black, the product may contain up to 1% carbon black.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid (granules).</td>
</tr>
<tr>
<td>Colour:</td>
<td>Natural or colored.</td>
</tr>
<tr>
<td>Odour:</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point:</td>
<td>215-225 °C</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt;400 °C</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density:</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Density:</td>
<td>&gt;1 g/cm³</td>
</tr>
<tr>
<td>Solubility:</td>
<td>Insoluble.</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>&gt;420 °C</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>&gt;320 °C</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties:</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity

10.1 Reactivity: No specific test data related to reactivity available for this product.
10.2 Chemical stability: The product is stable if stored and handled as prescribed/indicated.
10.3 Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid: No specific data.
10.5 Incompatible materials: No specific data.
10.6 Hazardous decomposition products: No specific data.
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Acute toxicity:</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritation/Corrosion:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Sensitisation:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Mutagenicity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reproductive toxicity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Teratogenicity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific target organ toxicity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Aspiration hazard:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Potential acute health effects:</td>
<td>Heated material can cause thermal burns resulting in pain, redness, blistering.</td>
</tr>
<tr>
<td>Potential chronic health effects:</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

NOTES: If the color of the product is black, the product may contain up to 1% carbon black.

NOTES: The components of this product are embedded in an impervious polymer matrix and are therefore not biologically available. The likelihood of adverse health effects arising from normal use of the product are considered very low.

12. ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>12.1 Toxicity:</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.2 Persistence and degradability:</td>
<td>Not available.</td>
</tr>
<tr>
<td>12.3 Bioaccumulative potential:</td>
<td>Not available.</td>
</tr>
<tr>
<td>12.4 Mobility in soil:</td>
<td>Not available.</td>
</tr>
<tr>
<td>12.5 Results of PBT and vPvB assessment:</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

NOTES: The components of this product are embedded in an impervious polymer matrix and are therefore not biologically available. This product is not biodegradable and not toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

| 13.1 Waste treatment methods: | Product methods of disposal: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC. Packing methods of disposal: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers. |

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14. TRANSPORT INFORMATION

14.1 Land transport: Not classified as a dangerous good under transport regulations.

14.2 Sea transport: Not classified as a dangerous good under transport regulations.

14.3 Air transport: Not classified as a dangerous good under transport regulations.

14.4 Special precautions for user:
Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.5 Transport in bulk: Not available.

14.6 Remark:
In case the material is delivered in bulk silo, the silo can contain 0.5 bar dry air at maximum. Relief pressure via vent line. Never use the manlid for pressure relief.

15. REGULATORY INFORMATION

15.1 Health, safety and environmental regulations:
Substances of very high concern (REACH) – none of the components are listed.
Prior informed consent (PIC) (649/2012/EU) – not listed.
Chemical weapon convention, Montreal protocol, Stockholm convention on persistent organic pollutants, Rotterdam convention on PIC, UNECE Aarhus protocol – not listed.

15.2 Chemical safety analysis:
No chemical safety analysis has been carried out.

16: OTHER INFORMATION

Abbreviations and acronyms
ATE = Acute Toxicity Estimate.
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008].
DMEL = Derived Minimal Effect Level.
DNEL = Derived No Effect Level.
EUH statement = statement.
PBT = Persistent, Bioaccumulative and Toxic.
PNEC = Predicted No Effect Concentration.
RRN = REACH Registration Number.
vPvB = Very Persistent and Very Bioaccumulative.

NOTES: The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications. The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product’s intended purpose. In case of any unclarity we advise consulting the supplier or an expert.