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

1.1 Product identifier

Damping layer DG-U1 green, comp A

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

Use:

Sound damping material

1.3 Details of the supplier of the safety data sheet

Swedac, Swedish Acoustic Products
Innovation AB
Storås Industrigata 5
424 69 Angered
Sweden
Telephone: +46 317441890
Fax: +46 31 229960

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008
Classified as Toxic for Reproduction (Repr. 2; H361d) and as Dangerous for the Environment (Env. Acute 1; H400 and Env. Chronic 2; H411).

Directive 67/548/EEC or 1999/45/EC

Classified as Dangerous for the Environment (N; R50, R51/53).

2.2 Label elements

Regulation (EC) No 1272/2008

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Hazard Pictograms

Signal word: Warning

Hazard statements:
H361d: Suspected of damaging the unborn child.
H400: Very toxic to aquatic life.
H411: Toxic to aquatic life with long-lasting effects.

Precautionary statements:
P202: Do not handle until all safety precautions have been read and understood.
P273: Avoid release to the environment.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P501: Dispose of contents/container in accordance with local regulation.

SECTION 3: Composition/information on ingredients

Type of product: Liquid

3.1 Substances

Polyester polyether mixture with minerales

Substance/preparation	CAS#	EG#	%	Classification (1272/2008/EC)	Classification (67/548/EEC)
Polyester polyether mixture	-	-	40-60%		
Minerals	-	-	40-60%		
Zinc Borate 2335	138265-88-0	235-804-2	5-15%	Repr. 2; H361d Env. acute 1; H400 Env. chronic 2; H411	N; R50, R51/53

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: Remove contaminated clothing.

If inhaled: If there is difficulty in breathing, medical attention should be obtained.

In case of skin contact: In case of skin contact wash affected areas thoroughly with soap and plenty of water.

In case of eye contact: Hold the eyes open and rinse with preferably lukewarm water for a sufficiently long

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2), Foam, extinguishing powder, in cases of larger fires, water spray should be used.

Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Burning releases carbon monoxide, carbon dioxide, oxides of nitrogen and traces of hydrogen cyanide. In the event of fire and/or explosion do not breathe fumes.

5.3 Advice for fire-fighters

Firemen must wear self-contained breathing apparatus.

Do not allow contaminated extinguishing water to enter the soil, ground-water or surface waters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Put on protective equipment (see section 8). Ensure adequate ventilation/exhaust extraction. Keep unauthorized persons away.

6.2 Environment related measures

Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Take up with absorbent for chemicals or, if necessary with dry sand and store in closed containers.

6.4 Reference to other sections

For further disposal measures see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

Precautions should generally be taken against electrostatic charges according to the equipment used and the way the product is handled and packaged.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at the end of workday. Keep working clothes separately. Change contaminated or soaked clothing.

7.2 Conditions for safe storage, including any incompatibilities

Keep container dry and tightly closed in a cool and well ventilated place. Further information on the storage conditions which must be observed to preserve quality can be found in our product information sheet.

Storage class (TRGS 510) : 10: Combustible liquids

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No information on Exposure Limit Values necessary according to EC directive 2006/121/EG

8.2 Exposure controls

Hand protection
Protective gloves are recommended.
Conditionally suitable materials for protective gloves; EN 374:
Nitrile rubber - NBR (>= 0.35 mm)
Breakthrough time not tested; dispose of immediately after contamination.

Eye protection
Wear eye/face protection.

Skin and body protection
Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	liquid
Colour:	green
Odour:	almost odourless
Odour Threshold:	not established

pH:	ca. 8,5	
pour point:	ca. -20 °C	
Initial boiling point:	ca. 135 °C	DIN 53171
Flash point:	> 150 °C	DIN EN 22719
Evaporation rate:	not established	
Flammability (solid, gas):	not applicable	
Burning number:	not applicable	
Vapour pressure:	ca. 3 hPa at 20 °C	EG A4
	ca. 12 hPa at 50 °C	EG A4
	ca. 15 hPa at 55 °C	EG A4
Vapour density:	not established	
Density:	ca. 1,08 g/cm³ at 20 °C	DIN 51757
Miscibility with water:	partly miscible at 15 °C	
Surface tension:	not established	
Partition coefficient (n−octanol/water):	not established	
Auto-ignition temperature:	not applicable	
Ignition temperature:	ca. 415 °C	DIN 51794
Decomposition temperature:	not established	
Viscosity, dynamic:	ca. 3.600 mPa.s at 25 °C	
Explosive properties:	not established	
Dust explosion class:	not applicable	
Oxidising properties:	not established	

9.2 Other information

The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

SECTION 10: Stability and reactivity

10.1 Reactivity

This information is not available.

10.2 Chemical stability

This information is not available.

10.3 Possibility of hazardous reactions

No hazardous reactions observed.

10.4 Conditions to avoid

This information is not available.

10.5 Incompatible materials

This information is not available.

10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

SECTION 11: Toxicological information

Toxicological studies on the product are not yet available.

An expected acute toxicity (LD50 rat oral) in the range of > 5000 mg/kg can be derived from other products.

Irritant/caustic action in analogy to a comparable product.

Skin effect: No skin irritation is expected.

Eye effect: Weak irritation of the eyes possible.

11.1 Information on toxicological effects

Summary of evaluation of the CMR properties:
Zinc borate is not mutagenic. No carcinogenicity studies with zinc borates are available, therefore no classification is possible. Zinc borate disassociates to zinc hydroxide and boric acid in the low pH environment of the stomach. No carcinogenic effects observed in chronic carcinogenicity studies of boric acid conducted in rats and mice, and no evidence of carcinogenic effects in zinc borate breakdown products. Developmental effects have been observed in laboratory animals, the most sensitive species being the rat with a NOAEL of 9.6 mg B/kg bw/day. While boron has been shown to adversely affect male reproduction in laboratory animals, there was no clear evidence of male reproductive effects attributable to boron studies of highly exposure workers. However, the low toxicity of zinc borate (acute oral LD_{50} is > 10,000 mg/kg) compared to other borates indicates that the bioavailability of boron from zinc borate may be low.

Toxicokinetics
Following a single oral dose (1000 mg/kg) of zinc borate (hydrate), zinc and boron appeared in rat plasma and tissue samples, indicating the hydrolysis of zinc borate in the gastrointestinal tract and subsequent systemic absorption of zinc and boron. In plasma, T_{max} occurred between 5 and 6 h after administration. Concentrations decreased to background levels by 72 h post-dose; T1/2 ranged from 5.0 to 7.7 h (zinc and boron, respectively). The gastrointestinal route was the primary elimination route for zinc, while urinary excretion via the kidneys was the primary elimination route for boron.

Information on likely routes of exposure:
Inhalation is the most significant route of exposure in occupational and other settings. Dermal exposure is not usually a concern because product is poorly absorbed through intact skin. Product is *not* intended for ingestion.

Symptoms related to the physical, and chemical and toxicological characteristics:
Not expected to be irritating to the eyes, nose, throat or skin in normal industrial use. Occasional mild irritiation effects to the nose and throat may occur from inhalation of dust at levels greater than 10 mg/m^3. Products containing zinc borate *not* intended for ingestion. Zinc borate has a low acute toxicity. Small amounts (e.g. a teaspoon) swallowed accidentally are not likely to cause effects; swallowing amounts larger than that may cause gastrointestinal symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:
Human epidemiological studies show no increase in pulmonary disease in occupational populations with chronic exposures to boric acid and sodium borate dust. Human epidemiological studies indicate no effect on fertility in occupational populations with chronic exposures to borate dust and indicate no effect to a general population with high exposures to borates in the environment.

SECTION 12: Ecological information

Do not allow to escape into waterways, wastewater or soil.

12.1 Toxicity

Data values are expressed as zinc ion or boron equivalents. To convert to this product, divide the zinc equivalent by 0.301 and divide the boron equivalent by 0.149. Studies judged to be unreliable or with insufficient information to evaluate are not included. All toxicity values are reported as added concentrations, i.e. with subtraction of the background concentration of zinc or boron in the test media.

12.2 Persistence and Degradability
No data available

12.3 Bioaccummulative potential
Zinc borate will hydrolyze under environmental conditions to boric acid and zinc hydroxide via zinc oxide. Boric acid will not biomagnify through the food chain. Zinc hydroxide solubility is low under neutral and basic conditions (pH). The rate of hydrolysis depends on the initial loading and pH. However, zinc is an essential element which is actively regulated by organisms, so bioaccumulation is not considered relevant.

12.4 Mobility in soil
Zinc borate will hydrolyze under environmental conditions to boric acid and zinc hydroxide. Adsorption of boric acid to soils or sediments is minimal. Adsorption of zinc ions is described by partition coefficients and may vary with site-specific conditions. For boric acid, the solids-water partitioning coefficients are 2.19 L/kg (soil) and 2.8 L/kg (sediment). For zinc, the solids-water partitioning coefficients are 159 L/kg (soil), 73,000 L/kg (freshwater/sediment), and 6010 L/kg
(seawater/sediment).

12.5 Results of PBT and vPvB assessment
No data available

SECTION 13: Disposal considerations

Dispose in accordance with applicable international, national and local laws, ordinances and statutes. For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used.

13.1 Waste treatment methods

After containers have been emptied as thoroughly as possible (e.g. by pouring, scraping or draining until "drip-dry"), they can be sent to an appropriate collection point set up within the framework of the existing take-back scheme of the chemical industry.
This product is classified as toxic to reproduction (Repr. 2) and as dangerous for the environment (Env. Acute 1) and falls within scope of Directive 2008/98/EC as hazardous waste (H10 and H14, respectively). Tonnage quantities of product should, if possible, be used for an appropriate application. Containers must be recycled in compliance with national legislation and environmental regulations.

None disposal into waste water.

SECTION 14: Transport information

ADR/RID

14.1 UN number	: 3082
14.2 UN proper shipping name	:Environmentally hazardous substance, liquid
14.3 Transport hazard class(es)	: 9
14.4 Packing group	: III
14.5 Environmental hazards	: Marine polluntant

ADN

14.1 UN number	: 3082
14.2 UN proper shipping name	:Environmentally hazardous substance, liquid
14.3 Transport hazard class(es)	: 9
14.4 Packing group	: III
14.5 Environmental hazards	: Marine polluntant

This classification data does not apply to transportation by tanker. If required, additional information can be requested from the manufacturer.

IATA

14.1 UN number	: 3082
14.2 UN proper shipping name	:Environmentally hazardous substance, liquid
14.3 Transport hazard class(es)	: 9
14.4 Packing group	: III
14.5 Environmental hazards	: Marine polluntant

IMDG

14.1 UN number	: 3082
14.2 UN proper shipping name	:Environmentally hazardous substance, liquid
14.3 Transport hazard class(es)	: 9

14.4 Packing group : III
14.5 Environmental hazards : Marine polluntant

14.6 Special precautions for user

See section 6 - 8.

Additional information Keep separated from foodstuffs.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

EU Directive 96/82 EC (Seveso II Directive)

Revision:	2003
Listed in regulation:	Directive 96/82/EC does not apply

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been conducted for this substance / mixture resp. its components.

SECTION 16: Other information

Further information
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. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.