1. Identification of the substance and of the company

1.1 Product identifiers

Product name PSS GRAM Column in *N,N*-Dimethylacetamide (less than 15 ml)

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

Identified uses Analytical Chemistry. Chromatography column
SDS refers to contents of the column
AMA0830101E2 - GRAM 100Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830101E2ACID - GRAM acid 100Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830101E2LS - GRAM Lux 100Å, 8 x 300 mm, 10µm, GPC/SEC column, pre-equilibrated for use with light scattering detectors
AMA0830101E3 - GRAM 1000Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830101E3LS - GRAM Lux 1000Å, 8 x 300 mm, 10µm, GPC/SEC column, pre-equilibrated for use with light scattering detectors
AMA0830101E4 - GRAM 10000Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830101E4ACID - GRAM acid 10000Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830101E4LS - GRAM Lux 10000Å, 8 x 300 mm, 10µm, GPC/SEC column, pre-equilibrated for use with light scattering detectors
AMA0830103E1 - GRAM 30Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830103E1ACID - GRAM acid 30Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830103E1LS - GRAM Lux 30Å, 8 x 300 mm, 10µm, GPC/SEC column, pre-equilibrated for use with light scattering detectors
AMA0830103E3 - GRAM 3000Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830103E3ACID - GRAM acid 3000Å, 8 x 300 mm, 10µm, GPC/SEC column
AMA0830103E3LS - GRAM Lux 3000Å, 8 x 300 mm, 10µm, GPC/SEC column, pre-equilibrated for use with light scattering detectors
AMA083010LIN - GRAM linear, 8 x 300 mm, 10µm, GPC/SEC column

1.3 Details of the supplier of the safety data sheet

Company PSS Polymer Standards Service GmbH
In der Dalheimer Wiese 5
D - 55120 Mainz

Technical phone +49 6131 - 96239 - 0
Fax +49 6131 - 96239 -11
Email sds@pss-polymer.com

1.4 Emergency telephone number

24-hour emergency contact number: +1 872 5888271 (PSS)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Eye irritation (Category 2), H319
Reproductive toxicity (Category 1B), H360

For the full text of the H-Statements mentioned in this Section, see Section 16.

Note: The product is intended for use as in chromatographic column. Use only as directed and in accordance with good laboratory practices. No safety and health hazard should be present, because the compounds are enclosed in the product. Only in case of release, is there a potential safety and health hazard.

2.2 Label elements

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

Signal word	Danger	
Hazard statement(s)		
Hazard Statements:	H312 + H332	Harmful in contact with skin or if inhaled.
	H319	Causes serious eye irritation.
	H360	May damage fertility or the unborn child.

Precautionary statement(s)	P201	Obtain special instructions before use.
	P280	Wear protective gloves/ protective clothing.
	P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313	IF exposed or concerned: Get edical advice/ attention.

Supplemental Hazard Statements none

Restricted to professional users.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. Composition / information on ingredients

3.1 Substances

Synonyms: ama# e.g. ama0830101e3
amm# e.g. amm0525101e3

Component: polyester based porous copolymer beads – in *N,N*-Dimethylacetamide (less than 15 ml)

Component Number	**1**	**2**
Component Name	Polyester based porous copolymer beads	*N,N*-Dimethylacetamide
CAS No	N/A	127-19-5
EC Number	N/A	204-826-4
Index Number	N/A	616-011-00-4
EC 1272/2008 hazard class, code and statement	N/A N/A	Acute Tox. 4; Eye Irrit. 2; Repr. 1B; H312 + H332, H319, H360
%wt (approx)	20-45	55-80

4. First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5. Fire fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx)

5.3 Advice for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use.Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

no data available

8. Exposure controls / personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Keep away from foodstuffs, beverages and feed. Immediately remove contaminated clothing.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection Tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Component Number	1	2
Component Name	Polyester based porous copolymer beads	*N,N*-Dimethylacetamide
Appearance:	solid / fluid	liquid
Odour	no data available	amine-like
Odour Threshold	no data available	no data available
pH	no data available	no data available
BP/BP Range	no data available	165°C
Mp/Mp Range	no data available	-20°C
Flash Point	no data available	no data available
Flammability	no data available	no data available
Autoignition Temp.	no data available	no data available
Oxidizing Properties	no data available	no data available
Explosive Properties	no data available	no data available
Explosion Limits	no data available	no data available
Vapor Pressure	no data available	no data available
SG/Density	no data available	0.937 g/cm3

Partition Coefficient	no data available	no data available
Viscosity	no data available	no data available
Evaporation Rate	no data available	no data available
Solubility in Water:	Insoluble	completely miscible
Molecular Weight	no data available	87.12 g/mol
Viscosity @ °C	no data available	no data available

9.2 Other safety information
no data available

10. Stability and reactivity

10.1 Reactivity
no data available

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
Heat, flames and sparks.

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - no data available

11. Toxicological information

11.1 Information on toxicological effects
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Acute toxicity
N,N-Dimethylacetamide:
LD50 Oral - Rat – 5.680 mg/kg
LC50 Inhalation - Rat - 1 h – 2475 ppm
LD50 Dermal - Rabbit – 2.240 mg/kg

Skin corrosion/irritation
N,N-Dimethylacetamide:
Skin - Rabbit
Result: No skin irritation.

Serious eye damage/eye irritation
N,N-Dimethylacetamide:
Eyes - Rabbit
Result: Irritating to eyes.

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
N,N-Dimethylacetamide:
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
N,N-Dimethylacetamide:
May cause congenital malformation in the fetus.
Presumed human reproductive toxicant
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
Specific target organ toxicity - single exposure
no data available
Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available
Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Additional Information

12. Ecological information

12.1 Toxicity
N,N-Dimethylacetamide:
Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - > 500 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates
Immobilization EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae static test
EC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 72 h

12.2 Persistence and degradability
no data available

12.3 Bioaccumulative potential
no data available

12.4 Mobility in soil
no data available

12.5 Results of PBT and vPvB assessment
N,N-Dimethylacetamide:
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
no data available

13. Disposal considerations

13.1 Waste treatment methods
Product
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product.

14. Transport information

This SDS is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient/s is/are encapsulated, the risk of exposure by inhalation, ingestion, skin contact, and eye contact is minimized.

DOT

UN-No.	UN3175
Proper Shipping Name	SOLIDS CONTAINING FLAMMABLE LIQUIDS N.O.S. (N,N-DIMETHYLACETAMIDE)
Hazard Class	4.1
Packing Group	II

IMDG / IATA / ADR: Not regulated

15. Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

N,N-Dimethylacetamide CAS-No.: 127-19-5
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
Toxic for reproduction (article 57c)

15.2 Chemical Safety Assessment

no data available

16. Other information

Full text of H-Statements referred to under sections 2 and 3.
Acute Tox. Acute toxicity
Eye Irrit. Eye irritation
H312 Harmful in contact with skin.
H312 + H332 Harmful in contact with skin or if inhaled
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H360 May damage fertility or the unborn child.

WARRANTY

The information in this document is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. PSS GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.

DISCLAIMER

For R&D use only. Not for drug, household, or other uses.