Société Suisse des Explosifs

Amylnitrit

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

1.1. Product identifier

Trade name/designation:

Amylnitrit

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

Use of the substance/mixture:

Chemical for synthesis

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Société Suisse des Explosifs Group
Fabrikstrasse 48
3900 Brig
Switzerland

Telephone: +41 27 922 71 11
Telefax: +41 27 922 72 00
E-mail: info@sse-group.com
Website: www.sse-schweiz.com
E-mail (competent person): msds@sse-group.com

1.4. Emergency telephone number

United States of America: Poison control center - national hotline number 1-800-222-1222 Great Britain: National phone number 111 Belgium: Centre antipoisons +32 070 245 245 / Bulgaria: +359 2 9154 233 / Croatia: +3851 2348 342 / Cyprus: +357 1401 / Czech Republic: +420 224 919 293, +420 224 915 402 / Denmark: +45 82 12 12 12 / Estonia: +372 16662, +372 7943 794 / Finland: +358 09 471 77 / France: numéro ORFILA (INRS) : +33 (0)1 45 42 59 59 / Greece: +30 21077 93777 / Hungary: +36 80 201 199 (24 hours) / Ireland: +353 (1) 809 2166 / Italy: +39 06 4997800 / Lithuania: +370 (85) 2362052 / Luxembourg: +352 8002 5500 / The Nederlands: +31 (0) 30 274 8888 / Norway: +47 22 59 13 00 / Portugal: +351 800 250 250 / Romania: +402 213 183 606 / Slovakia: +421 2 5477 4166 / Spain: National Emergency Telephone Number: +34 91 562 04 20 / Sweden: +46 112 (emergency 24 hours), +46 08-331231 (mon-fri 9.00-17.00). European Union: Call 112 if no specific phone number available., +41 27 922 71 11 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
flammable liquids *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	
Acute toxicity (oral) *(Acute Tox. 4)*	H302: Harmful if swallowed.	
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	

Amylnitrit

2.2. Label elements

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

Hazard pictograms:

GHS02
Flame

GHS07
Exclamation mark

Signal word: Danger

Hazard statements for physical hazards	
H225	Highly flammable liquid and vapour.

hazard statements for health hazards	
H302 + H332	Harmful if swallowed or if inhaled.

Supplemental hazard information: -

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response	
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor/etc./ if you feel unwell.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.1. Substances

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	**Substance name** **Classification according to Regulation (EC) No 1272/2008 [CLP]**	**Concen-tration**
CAS No.: 463-04-7 **EC No.:** 207-332-7	**pentyl nitrite** Acute Tox. 4, Flam. Liq. 2 **Danger** H225-H302-H332	≤ 100 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing.

After eye contact:
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion:
Rinse mouth. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Get medical advice/attention if you feel unwell.

Self-protection of the first aider:
Use personal protection equipment. No direct artificial respiration to be given by first aider.

4.2. Most important symptoms and effects, both acute and delayed
Cough, Dyspnoea, Cyanosis (blue coloured blood), Dizziness, Nausea, Vomiting, Circulatory collapse, Headache, Impairment of vision

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water spray jet, alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2)

Unsuitable extinguishing media:
Full water jet

5.2. Special hazards arising from the substance or mixture
Combustible

Hazardous combustion products:
Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx)

5.3. Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Keep closed containers cool by spraying water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Personal precautions:
Remove persons to safety.

Protective equipment:
Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders
Personal protection equipment:
Personal protection equipment: see section 8

6.2. Environmental precautions
Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up
For containment:
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Provide for retaining containers, e.g. floor pan without outflow.

For cleaning up:
Water (with cleaning agent)

6.4. Reference to other sections
Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

6.5. Additional information
Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Wear personal protection equipment (refer to section 8).

Fire prevent measures:
Take precautionary measures against static discharge. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Advices on general occupational hygiene
When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Keep container tightly closed in a cool, well-ventilated place. Avoid high temperatures or direct sunlight. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Recommended storage temperature: 2-8°C

Requirements for storage rooms and vessels:
Storage in the chemical cabinet. Quantities from 100 kg: Storage room with adequate explosion protection. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

Hints on storage assembly:
Do not store together with: Oxidising agent, strong. Alkali (lye), concentrated. Reducing agent, strong.

Storage class: 3 – Flammable liquids

7.3. Specific end use(s)
No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls
Ensure good ventilation of the workplace.

8.2.2. Personal protection equipment

Eye/face protection:
Eye glasses with side protection DIN EN 166.

Skin protection:
Wear multi layer protective glove based on fluor or brombutyle rubber according to EN 374. Min. layer thickness: 0.6 mm. Breakthrough time: No data available. Wear anti-static footwear and clothing Wear protective clothes against chemical agents in accordance to EN 340 / EN 14605.

Respiratory protection:
In emergency situations (for example unintended release of substance) wearing of a protective mask is necessary. Respiratory protection according to EN 136 or EN 140 with filter ABEK.

8.2.3. Environmental exposure controls
No data available

Amylnitrit

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: yellow
Odour: fruity

Safety relevant basis data

parameter		at °C	Method	Remark
pH	*not applicable*			
Melting point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	104 °C			
Decomposition temperature	*not determined*			
Flash point	-40 °C			
Evaporation rate	*not determined*			
Auto-ignition temperature	205 °C			
Upper/lower flammability or explosive limits	*not determined*			
Vapour pressure	65 hPa	20 °C		
Vapour density	1.2	20 °C		
Density	0.85 g/cm³	20 °C		
Bulk density	*not determined*			
Water solubility	poorly soluble	20 °C		
Partition coefficient: n-octanol/ water	2.85	20 °C		
Dynamic viscosity	*not determined*			
Kinematic viscosity	*not determined*			

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Moisture-sensitive. Sensitivity to light (photosentive).

10.3. Possibility of hazardous reactions

Violent reaction with: Oxidizing agent, Reducing agent

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

Harmful if swallowed.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Acute inhalation toxicity:
Harmful if inhaled.

Skin corrosion/irritation:
Based on available data, the classification criteria are not met.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Based on available data, the classification criteria are not met.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

Carcinogenicity:
Based on available data, the classification criteria are not met.

Reproductive toxicity:
Based on available data, the classification criteria are not met.

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

Aspiration hazard:
Based on available data, the classification criteria are not met.

Additional information:
No data available

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity:
Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

Biodegradation:
Biodegradable.

12.3. Bioaccumulative potential

Bioconcentration factor (BCF):
No indication of bioaccumulation potential.

Partition coefficient: n-octanol/water:
2.85 at °C: 20

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

Substance name	Results of PBT and vPvB assessment
pentyl nitrite CAS No.: 463-04-7 EC No.: 207-332-7	The substance in the mixture does not meet the PBT/ vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not allow to enter into surface water or drains. Eliminate the product and not completely emptied packages as hazardous waste.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Amylnitrit

Waste code product:

07 01 04 *	other organic solvents, washing liquids and mother liquors

*: Evidence for disposal must be provided.

Remark:
Wastecode according to regulation EU 2014/955

Waste treatment options

Appropriate disposal / Product:
Empty packaging can be recycled or eliminated as municipal solid waste.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN-No.			
UN 1113	UN 1113	UN 1113	UN 1113
14.2. UN proper shipping name			
AMYL NITRITE	AMYL NITRITE	AMYL NITRITE	AMYL NITRITE
14.3. Transport hazard class(es)			
 3	 3	 3	 3
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special provisions: **Limited quantity (LQ):** 1 l **Excepted Quantities (EQ):** E2 **Hazard identification number (Kemler No.):** 33 **Classification code:** F1 **Remark:**	**Special provisions:** **Limited quantity (LQ):** 1 l **Excepted Quantities (EQ):** E2 **Classification code:** F1 **Remark:**	**Special provisions:** **Limited quantity (LQ):** 1 l **Excepted Quantities (EQ):** E2 **EmS-No.:** F-E, S-D **Remark:**	**Special provisions:** **Limited quantity (LQ):** 1 l **Excepted Quantities (EQ):** E2 **Remark:**

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

SECTION 15: Regulatory information

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

No data available

15.2. Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

Amylnitrit

SECTION 16: Other information

16.1. Indication of changes
This material safety data sheet has been revised completely and is considered new without any previous version.

16.2. Abbreviations and acronyms
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR European agreement concerning the international carriage of dangerous goods by road
CAS Chemical Abstract Service
CLP Classification, labelling and Packaging
EC50 Effective Concentration 50%
EN European norm
IATA International Air Transport Association
IMDG-Code International Maritime Dangerous Goods Code
LC50 Lethal Concentration 50%
LD50 Lethal Dose 50%
OECD Organization for Economic Cooperation and Development
PBT persistent, bioaccumulative, toxic
PNEC Predicted No Effect Concentration
REACH Registration, Evaluation and Authorization of Chemicals
RID Regulations concerning the international carriage of dangerous goods by rail
SVHC Substance of Very High Concern
UN United Nations
VOC Volatile organic compounds
vPvB very persistent, very bioaccumulative

16.3. Key literature references and sources for data
Inventory of substances of the European Chemical Agency (ECHA). GESTIS database.

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification pro cedure
flammable liquids *(Flam. Liq. 2)*	H225: Highly flammable liquid and vapour.	
Acute toxicity (oral) *(Acute Tox. 4)*	H302: Harmful if swallowed.	
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H332	Harmful if inhaled.

16.6. Training advice
Persons charged with the handling and cleaning of the product must be trained prior to start their work and in regular intervals. They must be informed about the risks using the product and the mesures to take for efficient prevention. This concerns particularly working security, first aid, health and environment protection.

16.7. Additional information
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new madeup material.