



according to Regulation (EC) No 1907/2006 (REACH)

Print date: 03.02.2016
Revision date : 19.08.2015

Page 1/8

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

- **1.1 Product identifier**
- **Trade name:** **Emulex 1**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Explosives for commercial use.
Note the manufacturer's product information.
Use the product only within the framework of existing laws and regulatory approvals.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
AUSTIN POWDER GmbH
Weissenbach 16
A-8813 St. Lambrecht
Telefon +43(0)3585/2251
E-Mail: sdb@austinpowder.at
- **Information department:**
Werkschutz AUSTIN POWDER GmbH, (Mo – Fr 6 – 13 Uhr): +43(0)3585-2251
E-Mail Adresse: sdb@austinpowder.at
- **1.4 Emergency telephone number:** Poison Control Center: +43 (01) 406 43 43

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Expl. 1.1 H201 Explosive; mass explosion hazard.
Ox. Sol. 1 H271 May cause fire or explosion; strong oxidiser.
Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
Xn; Harmful
R22: Harmful if swallowed.
Xi; Irritant
R36/38: Irritating to eyes and skin.
E; Explosive
R2: Risk of explosion by shock, friction, fire or other sources of ignition.
O; Oxidising
R8-9: Contact with combustible material may cause fire. Explosive when mixed with combustible material.
- **Information concerning particular hazards for human and environment:**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system:**
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation. In terms of labelling the derogation according to Art. 23e in conjunction with Appendix I, section 1.3.5 und 2.1 is claimed.

(Contd. on page 2)

Emulex 1

(Contd. of page 1)

· Hazard pictograms



GHS01

· Signal word Danger

· Hazard statements

H201 Explosive; mass explosion hazard.

· Precautionary statements

- P221 Take any precaution to avoid mixing with combustibles.
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P250 Do not subject to grinding/shock/friction.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P373 DO NOT fight fire when fire reaches explosives.
 P306+P360 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
 P370+P380 In case of fire: Evacuate area.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P372 Explosion risk in case of fire.
 P313 Get medical advice/attention.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P401 Store in accordance with local/regional/national/international regulations.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 6484-52-2 EINECS: 229-347-8 Reg.nr.: 01-2119490981-27	ammonium nitrate ⊗ Xi R36; ⚠ O R8-9 ⚠ Ox. Sol. 2, H272; ⚠ Eye Irrit. 2, H319	50 - 80%
CAS: 7631-99-4 EINECS: 231-554-3 Reg.nr.: 01-2119488221-41	sodium nitrate, containing in the dry state more than 16,3 per cent by weight of nitrogen ⊗ Xn R22; ⊗ Xi R36/37/38; ⚠ O R8 ⚠ Ox. Sol. 2, H272; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10 - 16%

· Additional information For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· General information

- Personal protection for the First Aider.
 Take affected persons out into the fresh air.
 Take affected persons out of danger area and lay down.

· After inhalation

- Take affected persons into fresh air and keep quiet.
 Seek immediate medical advice.

In case of unconsciousness place patient stably in side position for transportation.

· After skin contact Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 3)



Emulex 1

(Contd. of page 2)

· **After eye contact**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing**

Rinse out mouth, seek medical treatment.

Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

Symptoms of poisoning may even occur after several hours, therefore medical observation for at least 48 hours after the accident.

Symptoms include methemoglobin formation through NO contact, pulmonary edema with a latency up to 48 hours.

In men with frequent inhalation: erectile dysfunction to impotency.

Information for doctor

Particularly for the prevention of pulmonary edema cortisone must be administered by inhalation (depending on the type of drug 5-10 inhalations).

Medical supervision of the patient at least for 72-96 hours.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

* **SECTION 5: Firefighting measures**

· **5.1 Extinguishing media**

· **Suitable extinguishing agents** Explosive material, no fire-fighting!

· **5.2 Special hazards arising from the substance or mixture**

Nitrogen oxides (NOx)

Carbon monoxide (CO)

Ammonia (NH₃)-fumes

If product is directly involved in the fire:

Explosion hazard - no fire fighting. Warn and evacuate the area. At least 300 m away for cover.

If product is not directly involved in the fire:

The fire from spreading to the product must avoid. If possible remove product from the danger zone.

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

· **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Announcing risk of explosion !

* **SECTION 6: Accidental release measures**

· **6.1 Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources

All persons whose presence is not necessary to remove from the affected area

Avoid contact with skin, clothes and eyes.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Avoid shock or friction

· **6.2 Environmental precautions:** No special measures required.

· **6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Announcing risk of explosion !

· **6.4 Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

* **SECTION 7: Handling and storage**

· **7.1 Precautions for safe handling**

Handle with care. Avoid jolting, friction and impact.

Keep receptacles tightly sealed.

(Contd. on page 4)



Emulex 1

(Contd. of page 3)

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

• **Information about protection against explosions and fires:**

Fire extinguishers provide.

Keep ignition sources away - Do not smoke.

Protect from heat.

Prevent impact and friction.

Use explosion-proof apparatus / fittings and spark-proof tools.

• **7.2 Conditions for safe storage, including any incompatibilities**

• **Storage**

• **Requirements to be met by storerooms and receptacles:** For storage is required a national permit

• **Information about storage in one common storage facility:**

Store away from oxidising agents.

Store away from reducing agents.

• **Further information about storage conditions:**

Store receptacle in a well ventilated area.

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

• **Recommended storage temperature:** Do not store below 5 °C or above 30 °C.

• **7.3 Specific end use(s)** No further relevant information available.

*

SECTION 8: Exposure controls/personal protection

• **Additional information about design of technical systems:** No further data; see item 7.

• **8.1 Control parameters**

• **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

• **Additional information:** The lists that were valid during the creation were used as basis.

• **8.2 Exposure controls**

• **Personal protective equipment**

• **General protective and hygienic measures**

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Do not inhale dust / smoke / mist. Avoid

contact with the eyes and skin. Do not

eat, drink, smoke while working.

• **Breathing equipment:**

Not necessary if room is well-ventilated.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure

use respiratory protective device that is independent of circulating air.

• **Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

None required during handling of packaged products, in the cases of direct contact with the explosive mass

Gloves:

• **Material of gloves**

Nitrile rubber, NBR

Neoprene gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 5)



Emulex 1

(Contd. of page 4)

- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Safety glasses
Tightly sealed goggles.
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Solid mass plastic to solid ground, covered in plastic cartridges
Colour:	White
Odour:	Odourless

· **pH-value:** Not applicable.

· **Change in condition**

Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Contact with combustible material may cause fire.

· **Ignition temperature:**

Decomposition temperature: > 170 °C (Explosionsgefahr)

· **Self igniting:** Product is not selfigniting.

· **Danger of explosion:** Risk of explosion by shock, friction, fire or other sources of ignition.
Explosive when mixed with combustible material.

· **Vapour pressure:** Not applicable.

· **Density at 20 °C:** 1.3 g/cm³

· **Solubility in / Miscibility with**

Water: Soluble

· **Solvent content:**

Organic solvents: 0.0 %

Solids content: 100.0 %

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Risk of explosion by shock, friction, fire or other sources of ignition.
- **10.2 Chemical stability** The product is chemically stable under the recommended conditions of use.
- **Conditions to avoid:**
Avoid: heat, flames, sparks.
Shock, friction (explosive hazard)
- **10.3 Possibility of hazardous reactions** Thermal decomposition begins at 170 °C;
- **10.5 Incompatible materials:**
Acids
alkali (lyes)
Avoid contaminations with other chemical/substances, especially chlorid-containing compounds, copper, brass i.a. copper-alloy, chromate and zinc.
- **10.6 Hazardous decomposition products:**
Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide

(Contd. on page 6)



Emulex 1

(Contd. of page 5)

Ammonia

SECTION 11: Toxicological information

• **11.1 Information on toxicological effects**

• **Acute toxicity:**

• **Primary irritant effect:**

• **on the skin:** Irritant to skin and mucous membranes.

• **on the eye:** Irritating effect.

• **Sensitisation:** No sensitising effects known.

• **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

SECTION 12: Ecological information

• **12.1 Toxicity**

• **Aquatic toxicity:** No further relevant information available.

• **12.2 Persistence and degradability** Easily biodegradable

• **12.3 Bioaccumulative potential** No further relevant information available.

• **12.4 Mobility in soil** No further relevant information available.

• **Ecotoxicological effects:**

• **Type of test Effective concentration Method Assessment**

Ammonium nitrate, CAS 6484-52-2

to aquatic organisms: LD50/96 h 10 - 100 ppm

for fish 800 mg / L lethal in 3.9 hours

Sodium nitrate; 7631-99-4

Toxicity to fish LC50 > 1000 mg / L 96 h

Daphnia Daphnia LC50 > 1000 mg / L 24 h

• **Additional ecological information:**

• **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

• **12.5 Results of PBT and vPvB assessment**

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

• **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

• **13.1 Waste treatment methods**

• **Recommendation** Must be specially treated adhering to official regulations.

• **European waste catalogue**

The disposal codes of the European list of wastes depend on the country of origin of the waste. This product has got identified uses in a various industries. This is, why a definite disposal code cannot be stated. The disposal code should be selected in agreement with disposer and/or the competent Authority.

• **Uncleaned packagings:**

• **Recommended cleansing agent:** Water, if necessary with cleansing agents.

SECTION 14: Transport information

• **14.1 UN-Number**

• **ADR, IMDG**


UN0241

(Contd. on page 7)



Emulex 1

(Contd. of page 6)

<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR 	0241 Sprengstoff, Typ E
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG 	
 <ul style="list-style-type: none"> · Class · Label 	1 Explosive substances and articles. 1
<ul style="list-style-type: none"> · IATA · Class 	1 Explosive substances and articles.
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG 	Void
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: 	No
<ul style="list-style-type: none"> · 14.6 Special precautions for user · EMS Number: 	Warning: Explosive substances and articles. F-B,S-X
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Tunnel restriction code 	B1000C
<ul style="list-style-type: none"> · IATA · Remarks: 	Air transport ICAO-IATA/DGR Prohibited.
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN0241, 0241, 1.1D (1)

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Liability about information is not warranted although information is given to our best knowledge.

· **Relevant phrases**

- H272 May intensify fire; oxidiser.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- R22 Harmful if swallowed.
- R36 Irritating to eyes.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R8 Contact with combustible material may cause fire.
- R9 Explosive when mixed with combustible material.

· **Recommended restriction of use**

Handling of explosives is permitted only to persons with the appropriate permission.

(Contd. on page 8)



Emulex 1

Print date: 03.02.2016
Revision date: 19.08.2015

(Contd. of page 7)

· **Department issuing MSDS:** Labor Austin Powder

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

Expl. 1.1: Explosives, Division 1.1

Ox. Sol. 1: Oxidising Solids, Hazard Category 1

Ox. Sol. 2: Oxidising Solids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· * **Data compared to the previous version altered.**