

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name: NISHIKI ULTRABURST****1.2 Relevant identified uses of the substance or mixture and uses advised against****Application of the substance / the mixture** Stone-breaking cartridge for crushing stone and concrete**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:****Nishiki Austria**

Inh. Jürgen Hoff

Anger 12 b

2881 Trattenbach

T: +43 664 9394716

**Further information obtainable from:**

Jürgen Hoff

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**1.4 Emergency telephone number:**

+43 664 9394716

Available:

Mon - Fri: 9 - 17 h

**Call the national emergency number!****SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Expl. 1.4 H204 Fire or projection hazard.

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

**Additional information:** For the wording of the hazard categories, see section 16.**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

GHS01

**Signal word** Warning

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**Hazard statements**

H204 Fire or projection hazard.

**Precautionary statements**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P234 Keep only in original packaging.
- P250 Do not subject to grinding/shock/friction.
- P280 Wear protective clothing / eye protection.
- P280 Wear hearing protection.
- P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
- P503 Refer to manufacturer/ supplier for information on disposal/recovery/ recycling.

**Additional information:**

Note: According to CLP Regulation (EC) No 1272/2008, Annex I, 1.3.5, explosive substances/mixtures and articles placed on the market with a view to producing an explosive or pyrotechnic effect shall be labelled and packaged exclusively in accordance with the provisions for explosive substances/mixtures and articles containing explosives.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** The mixture does not contain PBT substances  $\geq 0,1$  %.

**vPvB:** The mixture does not contain vPvB substances  $\geq 0,1$  %.

**Determination of endocrine-disrupting properties**

The product does not contain substances with endocrine-disrupting properties  $\geq 0.1$  %(w/w).

**SECTION 3: Composition/information on ingredients**






**3.2 Mixtures**

**Description:**

Pyrotechnic article of category P2.  
Contains a mixture of the following ingredients.

**Dangerous components:**





[% (w/w)]

CAS: 9004-70-0 Index number: 603-037-00-6	Cellulose nitrate	75 - < 95%
	 Expl. 1.3, H203	
CAS: 55-63-0 EINECS: 200-240-8 Index number: 603-034-00-X RTECS: QX 2100000 Reg.nr.: 01-2119488893-18-XXXX	Glycerol trinitrate	2.5 - < 20%
	 Expl. 1.1, H201	
	 Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330	
	 STOT RE 2, H373	
	 Aquatic Chronic 2, H411	

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CAS: 6484-52-2 EINECS: 229-347-8 Reg.nr.: 01-2119490981-27-XXXX	ammonium nitrate  Ox. Sol. 3, H272  Eye Irrit. 2, H319	1 - < 10%
CAS: 13114-72-2 EINECS: 236-039-7	akardit  STOT RE 2, H373  Acute Tox. 4, H302 Aquatic Chronic 3, H412	0.5 - < 3%

**Additional information:** For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

If used as intended, contact with the mixture contained is unlikely.  
If unconscious, use a stable lateral position and do not administer anything through mouth.  
Immediately remove any clothing soiled by the product.

**After inhalation:**

After inhalation of decomposition products:  
Remove person to fresh air and keep comfortable for breathing.  
In case of irregular breathing or respiratory arrest provide artificial respiration.  
Use a respiratory bag or breathing device.  
In case of unconsciousness place patient stably in side position for transportation.  
Medical supervision for at least 48 hours.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.  
Take off immediately all contaminated clothing and wash it before reuse.  
Seek medical treatment.

**After eye contact:**

Rinse opened eye for several minutes under running water.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Seek medical treatment in case of complaints.

**After swallowing:**

Rinse mouth.  
Do NOT induce vomiting.  
Call a doctor immediately.

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

Contact with explosive and/or decomposition gases causes severe eye irritation.  
Contact may cause burns and wounds.  
Inhalation of decomposition products may cause the following symptoms: Pulmonary oedema.  
Inhalation of decomposition products may cause damage to health.  
Serious damage may be delayed after exposure.

**4.3 Indication of any immediate medical attention and special treatment needed**

Depending on the condition of the patients, the doctor must assess the symptoms and the overall general condition.

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:** Use plenty of water spray.**For safety reasons unsuitable extinguishing agents:**

Water with full jet

Do not use powder or foam extinguishing agents and do not try to smother a fire with sand.

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

Contains an oxidising substance. Burns without external oxygen. Combustion of the contained mixture can lead to an explosion.

If a fire threatens to spread to an area containing pyrotechnic articles, evacuate the area to a safe distance and concentrate on preventing the fire from spreading.

Formation of toxic gases is possible during heating or in case of fire.

**5.3 Advice for firefighters****Protective equipment:**

Wear self-contained respiratory protective device.

Wear chemical protective clothing.

**Additional information**

Remove ignition sources, if possible without danger.

Remove container from fire, if possible without risk.

Cool endangered receptacles with water spray.

Do not inhale explosion gases or combustion gases.

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

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Restricted access to the affected area until cleaning work is completed.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid contact with skin and eyes.

If used as intended, it is unlikely that the mixture will escape. Should this nevertheless occur, the following measures must be taken.

Remove persons from danger area.

Keep away from ignition sources.

**6.2 Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

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

Pick up mechanically.

Dispose of the material collected according to regulations.

**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.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

Handling only by trained persons.  
 Do not open or destroy the cartridge by force.  
 Do not breathe dust/fume/gas/mist/vapours/spray.  
 Use personal protective equipment as required.  
 Observe protective measures and safety instructions.

**Information about fire - and explosion protection:**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Prevent impact and friction.  
 Ground and bond container and receiving equipment.

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

**Storage:**

**Requirements to be met by storerooms and receptacles:**

Store in dry conditions.  
 Store in accordance with local/regional/national/international regulations.

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

Store away from incompatible materials.  
 Storage together with other explosives and detonators only with the authorisation of the competent authority.

**Further information about storage conditions:**

Store in original container.  
 Protect from heat and direct sunlight.  
 Store locked up.  
 Keep it where children cannot reach it.

**Recommended storage temperature:** < 40 °C

**Storage class:** 1

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

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

Inhalation of the ingredients is unlikely.  
 Avoid inhalation of gases/fumes/dust generated during use.

**CAS: 55-63-0 Glycerol trinitrate**

IOELV (EU)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.095 mg/m <sup>3</sup> , 0.01 ppm Skin
MAK (Austria)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.095 mg/m <sup>3</sup> , 0.01 ppm

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AGW (Germany)	Long-term value: 0.094 mg/m <sup>3</sup> , 0.01 ppm 1(II);H, Y, DFG
LEP (Spain)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.094 mg/m <sup>3</sup> , 0.01 ppm VLI, vía dérmica
VLEP (France)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.095 mg/m <sup>3</sup> , 0.01 ppm Risque de pénétration percutanée
WEL (Great Britain)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.095 mg/m <sup>3</sup> , 0.01 ppm Sk
TWA (Italy)	Long-term value: 0.46 mg/m <sup>3</sup> , 0.05 ppm Cute
VL (Italy)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.095 mg/m <sup>3</sup> , 0.01 ppm Cute
WGW (Netherland)	Short-term value: 0.19 mg/m <sup>3</sup> , 0.02 ppm Long-term value: 0.095 mg/m <sup>3</sup> , 0.01 ppm

**CAS: 124-38-9 carbon dioxide**

IOELV (EU)	Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
MAK (Austria)	Short-term value: 18000 mg/m <sup>3</sup> , 10000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
AGW (Germany)	Long-term value: 9100 mg/m <sup>3</sup> , 5000 ppm 2(II);DFG, EU
LEP (Spain)	Long-term value: 9150 mg/m <sup>3</sup> , 5000 ppm VLI
VLEP (France)	Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
WEL (Great Britain)	Short-term value: 27400 mg/m <sup>3</sup> , 15000 ppm Long-term value: 9150 mg/m <sup>3</sup> , 5000 ppm
TWA (Italy)	Short-term value: 54000 mg/m <sup>3</sup> , 30000 ppm Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
VL (Italy)	Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm
WGW (Netherland)	Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm

**CAS: 630-08-0 carbon monoxide**

BOELV (EU)	Short-term value: 117 mg/m <sup>3</sup> , 100 ppm Long-term value: 23 mg/m <sup>3</sup> , 20 ppm
IOELV (EU)	Short-term value: 117 mg/m <sup>3</sup> , 100 ppm Long-term value: 23 mg/m <sup>3</sup> , 20 ppm
MAK (Austria)	Short-term value: 66 66* mg/m <sup>3</sup> , 60 60* ppm Long-term value: 23 33* mg/m <sup>3</sup> , 20 30* ppm *f. Tunnel-und Untertagebau bis 21.8.23,§33 Abs.5

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AGW (Germany)	Long-term value: 23 mg/m <sup>3</sup> , 20 ppm 3(II);DFG, EU, Z, 40
LEP (Spain)	Short-term value: 117 mg/m <sup>3</sup> , 100 ppm Long-term value: 23 mg/m <sup>3</sup> , 20 ppm VLI, TR1A, VLB, r
VLEP (France)	Short-term value: 117 mg/m <sup>3</sup> , 100 ppm Long-term value: 23 mg/m <sup>3</sup> , 20 ppm R1A
WEL (Great Britain)	Short-term value: 117* 232** mg/m <sup>3</sup> , 100* 200** ppm Long-term value: 23* 35** mg/m <sup>3</sup> , 20* 30** ppm *BMGV;**undergr.mining, tunnelling until 21/8/23
TWA (Italy)	Long-term value: 28.6 mg/m <sup>3</sup> , 25 ppm IBE
VL (Italy)	Short-term value: 117 mg/m <sup>3</sup> , 100 ppm Long-term value: 23 mg/m <sup>3</sup> , 20 ppm
WGW (Netherland)	Short-term value: 117 mg/m <sup>3</sup> , 100 ppm Long-term value: 23 mg/m <sup>3</sup> , 20 ppm
<b>CAS: 10102-43-9 nitrogen monoxide</b>	
IOELV (EU)	Long-term value: 2.5 mg/m <sup>3</sup> , 2 ppm
MAK (Austria)	Long-term value: 2.5 30* mg/m <sup>3</sup> , 2 25* ppm *f. Tunnel-und Untertagebau bis 21.8.23,§33 Abs.4
AGW (Germany)	Long-term value: 2.5 mg/m <sup>3</sup> , 2 ppm 2 (II);EU, AGS, 22b
LEP (Spain)	Long-term value: 2.5 10* mg/m <sup>3</sup> , 2 8* ppm VLI, *sectores míneria, túneles; cap. 9
VLEP (France)	Long-term value: 2.5 mg/m <sup>3</sup> , 2 ppm
WEL (Great Britain)	Long-term value: 2.5 30* mg/m <sup>3</sup> , 2 25* ppm *Only for undergr.mining, tunnelling until 21/8/23
TWA (Italy)	Long-term value: 31 mg/m <sup>3</sup> , 25 ppm IBEm
VL (Italy)	Long-term value: 2.5 mg/m <sup>3</sup> , 2 ppm
WGW (Netherland)	Long-term value: 2.5 mg/m <sup>3</sup> , 2 ppm
<b>CAS: 10102-44-0 nitrogen dioxide</b>	
IOELV (EU)	Short-term value: 1.91 mg/m <sup>3</sup> , 1 ppm Long-term value: 0.96 mg/m <sup>3</sup> , 0.5 ppm
MAK (Austria)	Short-term value: 1.91 12* mg/m <sup>3</sup> , 1 6* ppm Long-term value: 0.96 6* mg/m <sup>3</sup> , 0.5 3* ppm *f. Tunnel-und Untertagebau bis 21.8.23,§33 Abs.4
AGW (Germany)	Long-term value: 0.95 mg/m <sup>3</sup> , 0.5 ppm 2 (I);EU, 22a
LEP (Spain)	Short-term value: 1.91 5.74* mg/m <sup>3</sup> , 1 3* ppm Long-term value: 0.96 2.87* mg/m <sup>3</sup> , 0.5 1.5* ppm VLI, *sectores minería, túneles; cap. 9

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VLEP (France)	Short-term value: 1.91 mg/m <sup>3</sup> , 1 ppm Long-term value: 0.96 mg/m <sup>3</sup> , 0.5 ppm
WEL (Great Britain)	Short-term value: 1.91 mg/m <sup>3</sup> , 1 ppm Long-term value: 0.96 mg/m <sup>3</sup> , 0.5 ppm Not for undergr.mining, tunnelling until 21/8/23
TWA (Italy)	Short-term value: (9.4) mg/m <sup>3</sup> , (5) ppm Long-term value: (5.6) mg/m <sup>3</sup> , (3) ppm A4
VL (Italy)	Short-term value: 1.91 mg/m <sup>3</sup> , 1 ppm Long-term value: 0.96 mg/m <sup>3</sup> , 0.5 ppm
WGW (Netherland)	Short-term value: 1.91 mg/m <sup>3</sup> , 1 ppm Long-term value: 0.96 mg/m <sup>3</sup> , 0.5 ppm

**Regulatory information**

- IOELV (EU): (EU) 2019/1831
- MAK (Austria): GKV 2020, 156. Verordnung, 09.04.2021, Teil II
- AGW (Germany): TRGS 900
- LEP (Spain): Límites de exposición profesional para agentes químicos
- VLEP (France): ED 1487 26.04.2024
- WEL (Great Britain): EH40/2020
- TWA (Italy): Valori Limite di Soglia
- VL (Italy): D.lgs. n. 81/2008
- WGW (Netherland): Grenswaarden gezondheidsschadelijke stoffen

**DNELs**

**CAS: 55-63-0 Glycerol trinitrate**

Oral	Long-term exposure - systemic effects	0.5 mg/kg bw/d (consumer)
Dermal	Long-term exposure - systemic effects	0.5 mg/kg bw/d (workers)
	short-term exposure - systemic effects	2.5 mg/kg bw (workers)

**CAS: 6484-52-2 ammonium nitrate**

Oral	Long-term exposure - systemic effects	2.56 mg/kg bw/d (consumer)
Dermal	Long-term exposure - systemic effects	2.56 mg/kg bw/d (consumer)
		5.12 mg/kg bw/d (workers)
Inhalative	Long-term exposure - systemic effects	8.9 mg/m <sup>3</sup> (consumer)
		36 mg/m <sup>3</sup> (workers)

**CAS: 13114-72-2 akardit**

Dermal	Long-term exposure - systemic effects	1.167 mg/kg bw/d (human)
Inhalative	Long-term exposure - systemic effects	4.114 mg/m <sup>3</sup> (human)

**PNECs**

**CAS: 55-63-0 Glycerol trinitrate**

fresh water	0.02 mg/l
intermittent release (fresh water)	0.02 mg/l

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**Trade name: NISHIKI ULTRABURST**

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<b>CAS: 6484-52-2 ammonium nitrate</b>	
STP	18 mg/l
<b>Ingredients with biological limit values:</b>	
<b>CAS: 55-63-0 Glycerol trinitrate</b>	
BMGV (Great Britain)	15 µmol/mol creatinine Medium: urine Sampling time: at the end of the period of exposure Parameter: total nitroglycols

**Regulatory information** BMGV (Great Britain): EH40/2011**Additional Occupational Exposure Limit Values for possible hazards during processing:**

The national dust limits must be observed in the event of dust generation.

**Additional information:** The lists valid during the making were used as basis.**8.2 Exposure controls****Appropriate engineering controls**

No further data; see section 7.

Technical measures and the use of suitable working methods take priority over the use of personal protective equipment.

**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

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

Keep away from foodstuffs, beverages and feed.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing.

Store protective clothing separately.

Do not breathe dust/fume/gas/mist/vapours/spray.

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

**Respiratory protection:** Not necessary if used correctly.**Hand protection**

Not necessary if used correctly.

Wear protective gloves if the product is damaged.

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

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

**Material of 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.

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

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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**Eye/face protection**

Tightly sealed goggles

EN 166

**Body protection:**

Protective workwear made of cotton.

Wear antistatic protective clothing if there is a risk of ignition due to static electricity.

**Other** Wear hearing protection.**Environmental exposure controls**

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

<b>Physical state</b>	Solid
<b>Colour:</b>	Black and red with orange-red cable
<b>Odour:</b>	Not determined.
<b>Odour threshold:</b>	No information available.
<b>Melting point/freezing point:</b>	No information available.
<b>Boiling point or initial boiling point and boiling range</b>	No information available.
<b>Flammability</b>	Not determined.
<b>Lower and upper explosion limit</b>	
<b>Lower:</b>	No information available.
<b>Upper:</b>	No information available.
<b>Flash point:</b>	Not applicable.
<b>Decomposition temperature:</b>	No information available.
<b>pH</b>	Not applicable.
<b>Viscosity:</b>	
<b>Kinematic viscosity</b>	Not applicable.
<b>Dynamic:</b>	Not applicable.
<b>Solubility</b>	
<b>water:</b>	No information available.
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
<b>Vapour pressure:</b>	Not applicable.
<b>Density and/or relative density</b>	
<b>Density:</b>	No information available.
<b>Vapour density</b>	Not applicable.
<b>Particle characteristics</b>	
See section 3.	

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**9.2 Other information****Appearance:**

**Form:** Powder in hermetically sealed cartridge with ignition cable.

**Important information on protection of health and environment, and on safety.**

**Ignition temperature:** Product is not selfigniting.

**Explosive properties:** Risk of explosion by shock, friction, fire or other sources of ignition.

**Change in condition****Softening point/range****Oxidising properties**

No information available.

**Evaporation rate**

Not applicable.

**Information with regard to physical hazard classes**

**Explosives** Fire or projection hazard.

**Flammable gases** void

**Aerosols** void

**Oxidising gases** void

**Gases under pressure** void

**Flammable liquids** void

**Flammable solids** void

**Self-reactive substances and mixtures** void

**Pyrophoric liquids** void

**Pyrophoric solids** void

**Self-heating substances and mixtures** void

**Substances and mixtures, which emit flammable gases in contact with water** void

**Oxidising liquids** void

**Oxidising solids** void

**Organic peroxides** void

**Corrosive to metals** void

**Desensitised explosives** void

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** Risk of ignition due to impact, friction, fire or other sources of ignition.

**10.2 Chemical stability** No decomposition if used and stored according to specifications.

**10.3 Possibility of hazardous reactions** No further relevant information available.

**10.4 Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Handle with care. Avoid jolting, friction and impact.

**10.5 Incompatible materials:**

Acids and bases

Solvents, oils and greases

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**10.6 Hazardous decomposition products:**Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide and carbon dioxide

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

The undamaged product poses no danger.

**Acute toxicity** Toxic if swallowed or in contact with skin.**LD/LC50 values relevant for classification:****CAS: 9004-70-0 Cellulose nitrate**

Oral LD50 &gt; 5,000 mg/kg (rat)

**CAS: 6484-52-2 ammonium nitrate**

Oral LD50 2,217 mg/kg (rat)

Dermal LD50 &gt; 5,000 mg/kg (rat)

**CAS: 13114-72-2 akardit**

Oral LD50 2,000 mg/kg (rat)

**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** May cause damage to organs through prolonged or repeated exposure.**Aspiration hazard** Based on available data, the classification criteria are not met.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****CAS: 55-63-0 Glycerol trinitrate**

LC50 (96 h) 3.58 mg/l (fish)

**CAS: 6484-52-2 ammonium nitrate**

EC50 (48 h) 111 – 840 mg/l (daphnia) (Daphnia magna)

LC50 (48 h) 95 – 102 mg/l (fish)

**CAS: 13114-72-2 akardit**

EC50 (48 h) 20.4 mg/l (aquatic invertebrates)

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**Trade name: NISHIKI ULTRABURST**

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LC50 (96 h)	100 mg/l (fish)
EC50 (24 h)	100 mg/l (aquatic invertebrates)
LC50 (24 h)	100 mg/l (fish)
EC50 (3 h)	1 mg/l (microorganisms)

**12.2 Persistence and degradability**

9004-70-0	Cellulose nitrate	20 % (28 d)
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**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** The mixture does not contain PBT substances  $\geq 0,1$  %.**vPvB:** The mixture does not contain vPvB substances  $\geq 0,1$  %.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**12.7 Other adverse effects****Remark:** Harmful to fish**Additional ecological information:****General notes:**

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Harmful to aquatic life with long lasting effects.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Only dispose of product residues via authorised companies according to local legislation.

**European waste catalogue**

Notes: The European Waste Catalogue (EWC) classifies waste materials and categorises them according to what they are and how they were produced. This may cause other classifications. The final decision belongs to the last user.

16 04 03*	other waste explosives
HP1	Explosive
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP14	Ecotoxic

**Uncleaned packaging:****Recommendation:**

Dispose of packaging according to regulations on the disposal of packagings.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

(Contd. on page 14)

Trade name: NISHIKI ULTRABURST

(Contd. of page 13)

**SECTION 14: Transport information****14.1 UN number or ID number**

ADR/RID/ADN, IMDG, IATA

UN0432

**14.2 UN proper shipping name**

ADR/RID/ADN

0432 ARTICLES, PYROTECHNIC for technical purposes

IMDG, IATA

ARTICLES, PYROTECHNIC for technical purposes

**14.3 Transport hazard class(es)**

ADR/RID/ADN, IMDG, IATA



Class

1.4 Explosive substances and articles.

Label

1.4S

**14.4 Packing group**

Not applicable.

**14.5 Environmental hazards:**

Not applicable.

**14.6 Special precautions for user**

Not applicable.

**14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

**Transport/Additional information:****ADR/RID/ADN**

Limited quantities (LQ)

0

Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

Transport category

4

Tunnel restriction code

E

**IMDG**

Limited quantities (LQ)

0

Excepted quantities (EQ)

Code: E0

Not permitted as Excepted Quantity

UN "Model Regulation":

UN 0432 ARTICLES, PYROTECHNIC FOR TECHNICAL PURPOSES, 1.4

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category P1b EXPLOSIVES

Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t

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**Trade name: NISHIKI ULTRABURST**

(Contd. of page 14)

**Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t  
**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 65

**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

**REGULATION (EU) 2019/1148**

**Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

**Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

**Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

**Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

**National regulations:**

**Information about limitation of use:** Employment restrictions concerning juveniles must be observed.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

**Relevant phrases**

H201 Explosive; mass explosion hazard.

H203 Explosive; fire, blast or projection hazard.

H272 May intensify fire; oxidiser.

H300 Fatal if swallowed.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

**Training hints**

Regular training of staff involved in the transport of dangerous goods (in accordance with Chapter 1.3 ADR).

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**Trade name: NISHIKI ULTRABURST**

(Contd. of page 15)

Before handling, storage or use for the first time, employees must be informed about the properties of the substance and about measures taken to ensure safety and environmental protection.

<b>Classification according to Regulation (EC) No 1272/2008</b>	
Explosives	Übertragungsgrundsätze
Acute toxicity - oral Acute toxicity - dermal	Classification based on supplier information.
Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

**Department issuing SDS:**

UmEnA GmbH

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**Date of previous version:** 16.07.2024

**Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Expl. 1.1: Explosives – Division 1.1

Expl. 1.3: Explosives – Division 1.3

Expl. 1.4: Explosives – Division 1.4

Ox. Sol. 3: Oxidizing solids – Category 3

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 1: Acute toxicity – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3