

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**1 Identification of the substance/mixture and of the company/undertaking**

- **Product identifier**
- **Trade name:** Reload Swiss RS 24
- **Article number:** PC 00234
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**  
Propellant powder for non-commercial loading of cartridges for hunting and sporting ammunition
- **Application of the substance / the mixture** Article for gun tubes
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Nitrochemie Wimmis AG  
Niesenstrasse 44  
CH-3752 Wimmis
- **Further information obtainable from:**  
Dr. Dominic Kaase  
Leiter Stabsstelle  
Sicherheit und Umweltschutz  
Nitrochemie Wimmis AG  
Niesenstrasse 44  
CH-3752 Wimmis
- 
- Tel: +41 (0) 33 228 11 86  
Fax: +41 (0) 33 228 13 30  
E-Mail: dominic.kaase@nitrochemie.com  
URL: www.nitrochemie.com
- **Emergency telephone number:** During opening hours: +41/33 228 11 86

**2 Hazards identification**

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS01 exploding bomb

Expl. 1.4                      H204 Fire or projection hazard.



GHS06 skull and crossbones

Acute Tox. 2                      H300 Fatal if swallowed.

Acute Tox. 1                      H310 Fatal in contact with skin.



GHS08 health hazard

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

(Contd. on page 2)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 1)



Acute Tox. 4 H332 Harmful if inhaled.

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

· **Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

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

· **Hazard pictograms**



· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

glycerol trinitrate

· **Hazard statements**

H204 Fire or projection hazard.

H300+H310 Fatal if swallowed or in contact with skin.

H332 Harmful if inhaled.

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

H412 Harmful to aquatic life with long lasting effects.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P234 Keep only in original packaging.

P240 Ground and bond container and receiving equipment.

P250 Do not subject to grinding/shock/friction.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P262 Do not get in eyes, on skin, or on clothing.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.

P401 Store in accordance with local/regional/national/international regulations.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Information concerning particular hazards for human and environment:**

Handling larger quantities than contained in the original packaging is associated with increased danger, up to and including a mass explosion

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

· **vPvB:** Not applicable.

(Contd. of page 2)

### 3 Composition/information on ingredients

- **Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 9004-70-0	nitrocellulose ◆ Expl. 1.1, H201, EUH001	87.0%
CAS: 55-63-0 EINECS: 200-240-8	glycerol trinitrate ◆ Unst. Expl., H200; ◆ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; ◆ STOT RE 2, H373; ◆ Aquatic Chronic 2, H411; Flam. Liq. 2, H225	≥10–<13%

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

### 4 First aid measures

- **Description of first aid measures**
- **General information:**  
Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.  
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Do not induce vomiting; call for medical help immediately.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions.  
Water  
Water spray
- **For safety reasons unsuitable extinguishing agents:**  
Foam  
Extinguishing powder  
Carbon dioxide

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 3)

- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**  
Mouth respiratory protective device.  
Wear self-contained respiratory protective device.

\* **6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Remove persons from danger area.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.

\* **7 Handling and storage**

- **Precautions for safe handling**  
Thorough dedusting.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Prevent impact and friction.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** storage facility for explosives
- **Information about storage in one common storage facility:**  
only storage facility for explosives  
pay attention to the compatibility group
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Protect from heat and direct sunlight.
- **Storage class:** 1
- **Specific end use(s)** No further relevant information available.

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 4)

**8 Exposure controls/personal protection**

· **Control parameters**

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

**55-63-0 glycerol trinitrate**

<i>OEL</i>	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, IOELV

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Appropriate engineering controls** No further data; see item 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Standards of Personal Protective Equipment

Respiratory protection: EN 136:1998; EN 137:2006; EN 138:1994; EN 140:1998

Eye protection: EN 166:2001

Body protection: EN ISO 13688:2013; EN ISO 17491-3:2008; EN ISO 17491-4:2008; EN 943-1:2015; EN 943-2:2002

Protection of hands: EN ISO 374-1:2016; EN ISO 374-2:2003; EN ISO 374-3:2003

Safety shoes: EN ISO 20345:2011

· **Respiratory protection:**

Suitable respiratory protective device recommended.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Hand protection**



Protective gloves

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

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

· **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. 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.

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.11$  mm

· **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.

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 5)

· **Eye/face protection**



Tightly sealed goggles

Goggles recommended during refilling

· **Body protection:**

Protective work clothing

Heat-resistant protective clothing

Antistatic protective gear

Nomex

**9 Physical and chemical properties**

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

· **General Information**

· **Physical state**

Solid

· **Colour:**

Dark grey

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range**

Undetermined.

· **Flammability**

Flammable.

· **Lower and upper explosion limit**

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

Not applicable.

· **Auto-ignition temperature:**

170 °C

· **Decomposition temperature:**

Not determined.

· **pH**

Not applicable.

· **Viscosity:**

· **Kinematic viscosity**

Not applicable.

· **Dynamic:**

Not applicable.

· **Solubility**

· **water:**

Insoluble.

· **Partition coefficient n-octanol/water (log value)**

Not determined.

· **Vapour pressure:**

Not applicable.

· **Density and/or relative density**

· **Density:**

Not determined.

· **Relative density**

Not determined.

· **Vapour density**

Not applicable.

· **Particle characteristics**

See item 3.

· **Other information**

· **Appearance:**

· **Form:**

Solid

(Contd. on page 7)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 6)

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

- |                                |  |
|--------------------------------|--|
| · <b>Ignition temperature:</b> | 170 °C   |
| · <b>Explosive properties:</b> | Risk of explosion by shock, friction, fire or other sources of ignition. |
| · <b>Solvent content:</b>      |  |
| · <b>Solids content:</b>       | 100.0 %  |
| · <b>Change in condition</b>   |  |
| · <b>Evaporation rate</b>      | Not applicable.  |

**· Information with regard to physical hazard classes**

- |  |                            |
|--|----------------------------|
| · <b>Explosives</b>  | Fire or projection hazard. |
| · <b>Flammable gases</b>   | Void                       |
| · <b>Aerosols</b>  | Void                       |
| · <b>Oxidising gases</b>   | Void                       |
| · <b>Gases under pressure</b>  | Void                       |
| · <b>Flammable liquids</b>   | Void                       |
| · <b>Flammable solids</b>  | Void                       |
| · <b>Self-reactive substances and mixtures</b>                                     | Void                       |
| · <b>Pyrophoric liquids</b>  | Void                       |
| · <b>Pyrophoric solids</b>   | Void                       |
| · <b>Self-heating substances and mixtures</b>                                      | Void                       |
| · <b>Substances and mixtures, which emit flammable gases in contact with water</b> | Void                       |
| · <b>Oxidising liquids</b>   | Void                       |
| · <b>Oxidising solids</b>  | Void                       |
| · <b>Organic peroxides</b>   | Void                       |
| · <b>Corrosive to metals</b>   | Void                       |
| · <b>Desensitised explosives</b>   | Void                       |

**10 Stability and reactivity**

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
  - Danger of explosion.
  - Reacts with acids, alkalis and oxidising agents.
  - Reacts with reducing agents.
  - Develops toxic gases/fumes.
  - Flammable.
  - Risk of explosion by shock, friction, fire or other sources of ignition
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**
  - Carbon monoxide and carbon dioxide

(Contd. on page 8)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

Nitrogen oxides (NO<sub>x</sub>)

(Contd. of page 7)

### 11 Toxicological information

· **Information on hazard classes as defined in Regulation (EC) No 1272/2008**

· **Acute toxicity**

Fatal if swallowed or in contact with skin.  
Harmful if inhaled.

· **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	38.5–71.4 mg/kg
Dermal	LD50	38.5–71.4 mg/kg
Inhalative	LC50/4 h	3.85–7.14 mg/l

· **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.

· **Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

### 12 Ecological information

· **Toxicity**

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

· **Persistence and degradability** No further relevant information available.

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

· **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.

Danger to drinking water if even extremely small quantities leak into the ground.

(Contd. on page 9)



**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

Harmful to aquatic organisms

(Contd. of page 8)

**13 Disposal considerations**


- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

HP1	Explosive
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP14	Ecotoxic

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **UN number or ID number**  
· **ADR, IMDG, IATA** UN0509
  - **UN proper shipping name**  
· **ADR** 0509 Powder, smokeless  
· **IMDG, IATA** Powder, smokeless
  - **Transport hazard class(es)**  
· **ADR, IMDG, IATA**
- 
- **Class** 1 Explosive substances and articles.
  - **Label** 1.4
  - **Packing group**  
· **ADR, IMDG, IATA** not regulated
  - **Environmental hazards:** Not applicable.
  - **Special precautions for user** Warning: Explosive substances and articles.
  - **Hazard identification number (Kemler code):** 1.4C
  - **EMS Number:** F-B,S-Y
  - **Maritime transport in bulk according to IMO instruments** Not applicable.

(Contd. on page 10)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 9)

**· Transport/Additional information:**

**· ADR**

· **Transport category** 2  
· **Tunnel restriction code** (E)

· **UN "Model Regulation":** UN 0509 POWDER, SMOKELESS, 1.4

**15 Regulatory information**

**· 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**

H1 ACUTE TOXIC

P1b EXPLOSIVES

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 20 t

· **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.

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

**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.*

**· Relevant phrases**

H200 Unstable explosives.

H201 Explosive; mass explosion hazard.

H225 Highly flammable liquid and vapour.

H300 Fatal if swallowed.

H310 Fatal in contact with skin.

(Contd. on page 11)

**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

Printing date 03.10.2022

Version number 1

Revision: 03.10.2022

**Trade name: Reload Swiss RS 24**

(Contd. of page 10)

*H330 Fatal if inhaled.*  
*H373 May cause damage to organs through prolonged or repeated exposure.*  
*H411 Toxic to aquatic life with long lasting effects.*  
*EUH001 Explosive when dry.*

· **Department issuing SDS:** department for health and security and environment

· **Contact:** -

· **Date of previous version:** 06.09.2022

· **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)*

*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. 1.4: Explosives – Division 1.4*

*Unst. Expl.: Explosives – Unstable explosive*

*Flam. Liq. 2: Flammable liquids – Category 2*

*Acute Tox. 2: Acute toxicity – Category 2*

*Acute Tox. 1: Acute toxicity – Category 1*

*Acute Tox. 4: Acute toxicity – Category 4*

*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*

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