

RWS 9x17 W

Safety Data Sheet

according to GB/T 16483 and GB/T 17519

Other hazards not mentioned above are Not applicable or No data is available.

Label elements

Hazard pictograms (GHS CN)



Signal word (GHS CN)

Warning.

Hazard statements (GHS CN)

H204 - Fire or projection hazard.

Precautionary statements (GHS CN)

Prevention measures

P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P250 - Do not subject to grinding, shock, friction.

P280 - Wear eye protection.

Incident response

P370+P380+P375 - In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

P372 - Explosion risk in case of fire.

Safe storage

P401 - Store in accordance with local regulations on explosives.

Physical and chemical hazards

Fire or projection hazard

Health hazards

Symptoms/effects

Not expected to present a significant hazard under anticipated conditions of normal use

Environmental hazards

No additional information available

Other hazards

This article contains hazardous substances or preparations not intended to be released under normal or reasonably foreseeable conditions of use.

The dismantling of the article is prohibited!

Keep away from ignition sources (including static discharges)

SECTION 3 Composition/information on ingredients

Product form

Article.

Comments

max. net explosives weight each cartridge in mg:
Caliber 9x17; yellow: 500; red: 605.

Within the cartridges the explosive ingredients (gun powder and priming composition) are hermetically separated from the environment. They will be only opened with effort and under destruction of the article.

Propellant powder: glycerol trinitrate containing nitrocellulose powder

Mass per cartridge: essentially dependent on the required power (500-610 mg).

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Exposed propellant powder outside a cartridge is harmful if swallowed and highly flammable; without tamping no explosion risk.
Packed safety cartridges don't represent a significant risk.
In case of reaction no dangerous fragments or projectiles will be formed.
Mechanical or thermal attempts to expose the primer composition lead to an immediate reaction of the dangerous ingredients.

Ingredient(s)	Concentration or concentration ranges (w/w %)	CAS No.
glycerol trinitrate	1 - 4	55-63-0
lead styphnate	0.1 - 1	15245-44-0
diphenylamine	0.1 - 1	122-39-4

SECTION 4 First-aid measures

Description of necessary first-aid measures

First-aid measures general	In all cases of doubt, or when symptoms persist, seek medical attention
First-aid measures after inhalation	Allow affected person to breathe fresh air. Allow the victim to rest
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse
First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention

Most important symptoms/effects

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use
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Advices for first aid responders

No additional information available

Notes for the doctor

Other medical advice or treatment	No additional information available
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SECTION 5 Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Dry powder Water spray
Unsuitable extinguishing media	Do not use a heavy water stream

Specific hazards

Hazardous decomposition products in case of fire	Carbon monoxide Carbon dioxide Nitrous gasses
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Advice for firefighters and protective measures

Firefighting instructions	Use water spray or fog for cooling exposed containers Exercise caution when fighting any chemical fire Prevent fire fighting water from entering the environment
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures	Remove ignition sources Use special care to avoid static electric charges No open flames. No smoking
Personal Precautions, Protective Equipment and Emergency Procedures	No additional information available

For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel
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For emergency responders

Protective equipment	Equip cleanup crew with proper protection
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Environmental precautions

Prevent entry to sewers and public waters	
Notify authorities if liquid enters sewers or public waters	

Methods and material for containment and cleaning up

Methods for cleaning	Pick up loose cartridges only by hand. Exposed ingredients must be swept up carefully and phlegmatized in a water container, labelled according the regulations, wipe down with water the contaminated area. Store away from other materials.
For containment	No additional information available

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Prevention measures for secondary accidents

Prevention Measures for Secondary Accidents	No additional information available
Other information	Dispose of materials or solid residues at an authorized site For further information refer to section 8: "Exposure controls/personal protection" For further information refer to section 13

SECTION 7 Handling and storage

Handling

Precautions for safe handling	Do not subject to grinding, shock, friction Take precautionary measures against static discharge. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product
Local and general ventilation	No additional information available
Additional hazards when processed	Hazardous waste due to potential risk of explosion

Storage

Storage conditions	Keep only in the original container in a cool, well ventilated place away from : Direct sunlight Heat sources Store in a dry place.
Material used in packaging/containers	No additional information available
Incompatible products	Strong bases. Strong acids.
Storage temperature	5 - 25 °C
Information on mixed storage	Keep away from : Ignition sources Store according to local legislation
Storage area	Store away from heat

SECTION 8 Exposure controls / Personal protection equipment

Occupational exposure limits

glycerol trinitrate (55-63-0)	
China - Occupational Exposure Limits	
Local name	硝化甘油 # Nitroglycerine
OEL MAC	1 mg/m ³
Remark (CN)	皮
Regulatory reference	GBZ 2.1-2019

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diphenylamine (122-39-4)	
China - Occupational Exposure Limits	
Local name	二苯胺 # Diphenylamine
OEL PC-TWA	10 mg/m ³
Regulatory reference	GBZ 2.1-2019

Biological limit values

No additional information available

Monitoring methods

No additional information available

Appropriate engineering controls

No additional information available

Personal protective equipment

Personal protective equipment	When using cartridge operated tools, sufficient ear protection must be worn.
Environmental exposure controls	Avoid release to the environment.
Other information	Do not eat, drink or smoke during use No additional information available
Hand protection	Not required for normal conditions of use
Eye protection	Safety glasses
Skin and body protection	When using cartridge operated tools, sufficient ear protection must be worn.
Respiratory protection	Not required for normal conditions of use
Personal protective equipment symbol(s)	



SECTION 9 Physical and chemical properties

Physical state	Solid
Appearance	No data available
Colour	According to product specification
Odour	No data available
pH	No data available
Melting point	No data available
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Flammability	Non flammable.
Vapour pressure	No data available

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Relative vapour density at 20° C	No data available
Density	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, kinematic	Not applicable
Explosive limits (vol %)	Not applicable
Lower explosion limit	No data available
Upper explosion limit	No data available
Radioactive	No
Explosive properties	Fire or projection hazard.

SECTION 10 Stability and reactivity

Chemical stability	Stable under normal conditions
Reactivity	No additional information available
Possibility of hazardous reactions	Risk of explosion by shock, friction, fire or other sources of ignition Heating may cause an explosion. At high temperatures : >150 ° C reaction
Conditions to avoid	Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating
Incompatible materials	Strong acids Strong bases
Hazardous decomposition products	Carbon monoxide Carbon dioxide Nitrogen oxides Metal oxides Thermal decomposition can lead to the release of irritating gases and vapours
Other properties	No additional information available

SECTION 11 Toxicological information

Acute toxicity

Acute toxicity (oral)	No data available (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	No data available (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	No data available (Based on available data, the classification criteria are not met)

glycerol trinitrate (55-63-0)

LD50 oral	685 mg/kg
LD50 dermal rat	> 9560 mg/kg bodyweight (OECD 402 method)
LD50 dermal	9560 mg/kg
ATE CN (oral)	5 mg/kg bodyweight
ATE CN (dermal)	5 mg/kg bodyweight
ATE CN (gases)	100 ppmv/4h
ATE CN (vapours)	0.5 mg/l/4h

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ATE CN (dust, mist)	0.05 mg/l/4h
lead styphnate (15245-44-0)	
LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402 method)
LC50 Inhalation - Rat (Dust/Mist)	> 5.05 mg/l/4h (OECD 403 method)
ATE CN (oral)	500 mg/kg bodyweight
ATE CN (dust, mist)	1.5 mg/l/4h
diphenylamine (122-39-4)	
LD50 oral rat	> 800 mg/kg bodyweight
LD50 oral	2480 mg/kg
LD50 dermal	5000 mg/kg
ATE CN (oral)	100 mg/kg bodyweight
ATE CN (dermal)	300 mg/kg bodyweight
ATE CN (gases)	700 ppmv/4h
ATE CN (vapours)	3 mg/l/4h
ATE CN (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation

Skin corrosion/irritation No data available (Based on available data, the classification criteria are not met)

Serious eye damage/eye irritation

Serious eye damage/irritation No data available (Based on available data, the classification criteria are not met)

Respiratory or skin sensitisation

Respiratory or skin sensitisation No data available (Based on available data, the classification criteria are not met)

Germ cell mutagenicity

Germ cell mutagenicity No data available (Based on available data, the classification criteria are not met)

Carcinogenicity

Carcinogenicity No data available (Based on available data, the classification criteria are not met)

Reproductive toxicity

Reproductive toxicity No data available (Based on available data, the classification criteria are not met)

STOT - single exposure

STOT-single exposure No data available (Based on available data, the classification criteria are not met)

glycerol trinitrate (55-63-0)	
STOT-single exposure	Causes damage to organs.

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STOT - repeated exposure

STOT-repeated exposure No data available (Based on available data, the classification criteria are not met)

glycerol trinitrate (55-63-0)

STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
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lead styphnate (15245-44-0)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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diphenylamine (122-39-4)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
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Aspiration hazard

Aspiration hazard No data available (Based on available data, the classification criteria are not met)

Additional information No additional information available

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Viscosity, kinematic Not applicable

SECTION 12 Ecological information

Ecotoxicity

Ecology - general No harmful effects are to be expected if used properly.
The contained ingredients can be harmful, but they are hermetically enclosed in the article and can not be released.
The dismantling of the article is prohibited.

Hazardous to the aquatic environment, short-term (acute) No data available (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic) No data available (Based on available data, the classification criteria are not met)

glycerol trinitrate (55-63-0)

LC50 - Fish [1]	1.9 mg/l (96 h; Oncorhynchus mykiss; ASTM Designation E 729-80)
EC50 - Crustacea [1]	17.83 mg/l (48 h; Ceriodaphnia dubia; ASTM Designation E 729-80)
EC50 96h - Algae [1]	1.15 mg/l (Raphidocelis subcapitata; EPA TSCA Experimental Method 797.1060)
NOEC chronic fish	0.03 mg/l
NOEC chronic crustacea	3.23 mg/l (7 d; Ceriodaphnia dubia)

lead styphnate (15245-44-0)

LC50 - Fish [1]	0.107 mg/l (96 h; Oncorhynchus mykiss; Lead)
EC50 - Crustacea [1]	7 mg/l
NOEC chronic fish	0.0189 - 1.559 mg/l (Fish; Lead)

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NOEC chronic crustacea	0.0017 - 0.496 mg/l (aquatic invertebrates; Lead)
BCF - Fish [1]	1.553
Partition coefficient n-octanol/water (Log Kow)	-2.19 (20 ° C)
diphenylamine (122-39-4)	
EC50 - Crustacea [1]	2 mg/l (48 h; Daphnia magna; (OECD 202 method))
EC50 72h - Algae [1]	2.17 mg/l (Raphidocelis subcapitata; (OECD 201 method))
NOEC chronic algae	0.0273 mg/l
Partition coefficient n-octanol/water (Log Kow)	3.82 (20,2 ° C)

Persistence and degradability

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Persistence and degradability Not established

glycerol trinitrate (55-63-0)	
Persistence and degradability	Inherently biodegradable
Biodegradation	92.2 % (84 h)
lead styphnate (15245-44-0)	
Not rapidly degradable	Yes
diphenylamine (122-39-4)	
Not rapidly degradable	Yes
Persistence and degradability	Not readily biodegraded
Biodegradation	26 % (28 d; (OECD 301D method))

Bioaccumulative potential

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Bioaccumulative potential Not established

glycerol trinitrate (55-63-0)	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4)
lead styphnate (15245-44-0)	
BCF - Fish [1]	See section 12.1 on ecotoxicology 1.553
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology -2.19 (20 ° C)
diphenylamine (122-39-4)	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4)
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology 3.82 (20,2 ° C)

Mobility in soil

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Bioaccumulative potential Not established

glycerol trinitrate (55-63-0)	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4)
Ecology - soil	Low potential for adsorption in soil.

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lead styphnate (15245-44-0)	
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology-2.19 (20 ° C)
diphenylamine (122-39-4)	
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4)
Surface tension	72.3 mN/m (20 ° C; EU Method A.5)
Partition coefficient n-octanol/water (Log Kow)	See section 12.1 on ecotoxicology3.82 (20,2 ° C)

Other adverse effects

Classification procedure (Ozone)	No data available
Other information	Avoid release to the environment.

Results of PBT and vPvB assessment

PBT	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
vPvB	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 13 Disposal considerations

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Contaminated container and packaging	No additional information available
Additional information	No additional information available
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations Refer to manufacturer/supplier for information on recovery/recycling At high temperatures may form : Response
Ecology - waste materials	Avoid release to the environment.

SECTION 14 Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 0323	UN 0323	UN 0323	UN 0323
14.2. UN proper shipping name			
CARTRIDGES, POWER DEVICE	CARTRIDGES, POWER DEVICE	Cartridges, power device	CARTRIDGES, POWER DEVICE

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ADR	IMDG	IATA	RID
Transport document description			
UN 0323 CARTRIDGES, POWER DEVICE, 1.4S, (E)	UN 0323 CARTRIDGES, POWER DEVICE, 1.4S	UN 0323 Cartridges, power device, 1.4S	UN 0323 CARTRIDGES, POWER DEVICE, 1.4S
14.3. Transport hazard class(es)			
1.4S	1.4S	1.4S	1.4S
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

Overland transport

Classification code (ADR)	1.4S
Special provisions (ADR)	347
Limited quantities (ADR)	0
Excepted quantities (ADR)	E0
Packing instructions (ADR)	P134, LP102
Mixed packing provisions (ADR)	MP23
Transport category (ADR)	4
Special provisions for carriage - Loading, unloading and handling (ADR)	CV1, CV2, CV3
Special provisions for carriage - Operation (ADR)	S1
Tunnel restriction code (ADR)	E

Transport by sea

Special provisions (IMDG)	347
Limited quantities (IMDG)	0
Excepted quantities (IMDG)	E0
Packing instructions (IMDG)	P134, LP102
EmS-No. (Fire)	F-B
EmS-No. (Spillage)	S-X
Stowage category (IMDG)	01
Stowage and handling (IMDG)	SW1

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Properties and observations (IMDG) See glossary of terms in appendix B.

MFAG-No 114

Air transport

PCA Excepted quantities (IATA) E0
PCA Limited quantities (IATA) Forbidden
PCA limited quantity max net quantity (IATA) Forbidden
PCA packing instructions (IATA) 134
PCA max net quantity (IATA) 25kg
CAO packing instructions (IATA) 134
CAO max net quantity (IATA) 100kg
Special provisions (IATA) A165, A802
ERG code (IATA) 3L

Rail transport

Classification code (RID) 1.4S
Special provisions (RID) 347
Limited quantities (RID) 0
Excepted quantities (RID) E0
Packing instructions (RID) P134, LP102
Mixed packing provisions (RID) MP23
Transport category (RID) 4
Special provisions for carriage - Packages (RID) W2
Special provisions for carriage - Loading, unloading and handling (RID) CW1
Colis express (express parcels) (RID) CE1
Hazard identification number (RID) 1.4S

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15 Regulatory information

Dangerous Goods List (GB 12268-2012) Contains listed substance(s).
Regulation on the Safety Management of Hazardous Chemicals Catalogue of Hazardous Chemicals (2015).
Rules for dangerous goods transport by railway List of dangerous goods by railway (2009).
Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used List of Highly Toxic Chemicals (2002).

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New Chemical Substance Environmental Management Registration Measures (MEE Order 12 of 2020)

Inventory of Existing Chemical Substances in China (IECSC) Contains listed substance(s)
 1,2,3-Propanetriol, 1,2,3-trinitrate (CAS-No. 55-63-0)
 Diphenylamine (CAS-No. 122-39-4)

Regulations on the Safe Management of Hazardous Chemicals (Decree 591 of the State Council)

Catalogue of Hazardous Chemicals (2015) Contains Hazardous Chemical(s)
 Nitroglycerin [desensitized with not less than 40% non-volatile water-insoluble phlegmatizer, by mass] (CAS-No. 55-63-0)
 lead 2,4,6-trinitro-m-phenylene dioxide [with not less than 20% phlegmatizer] (CAS-No. 15245-44-0)
 Diphenylamine (CAS-No. 122-39-4)
 Considered as Hazardous Chemical(s)

Identification of major hazard installations for dangerous chemicals (GB 18218) Contains listed substance(s)
 Nitroglycerine (CAS-No. 55-63-0)

Law of the People's Republic of China on the Prevention and Control of Occupational Diseases

Catalogue for Classification of Hazardous Factors of Occupational Diseases Contains listed substance(s)
 Nitroglycerine (CAS-No. 55-63-0)

List of Highly Toxic Substances Contains listed substance(s)
 Diphenylamine (CAS-No. 122-39-4)

Regulation on the Administration of Precursor Chemicals (Decree 445 of the State Council)

Catalogue of Precursor Chemicals

Other domestic regulatory lists

Dangerous Goods List (GB 12268-2012) Contains listed substance(s)
 NITROGLYCERIN SOLUTION IN ALCOHOL with not more than 1% nitroglycerin (CAS-No. 55-63-0)

Inventory of Hazardous Chemicals under Key Supervision Contains listed substance(s)
 Nitroglycerine (CAS-No. 55-63-0)

SECTION 16 Other information

Data sources European Chemicals Agency, <http://echa.europa.eu/> manufacturer

Abbreviations and acronyms	
CAS-No.	Chemical Abstract Service number
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
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	Derived-No Effect Level

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EC50	Median effective concentration
ED	Endocrine disrupting properties
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IOELV	Indicative Occupational Exposure Limit Value
LC50	Median lethal concentration
LD50	Median lethal dose
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
N. O. S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
vPvB	Very Persistent and Very Bioaccumulative
NOAEL	No-Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level

Section	Changed item	Change	Comments
	General.	Modified.	
11.	Toxicological information.	Modified.	
12.	Ecotoxicological information.	Modified.	
15.	Regulatory information.	Added.	

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.