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Version 01

MSDS Control Group Olin Brass and Winchester, Inc.

East Alton, IL 62024-1273

Date printed 18.08.2022, Revision 18.08.2022

1	Product identifier		
		CARTRIDGE STRIPS - FOR TOOLS, POW V4LVS27Y, V6REDLVS27, V7BLKLVS27	/ER DEVICES
.2	Relevant identified uses of t	he substance or mixture and uses advised against	
1.2.1	Relevant uses		
		Cartridges for tools	
1.2.2	2 Uses advised against		
	C C	None known.	
1.3	Details of the supplier of the	e safety data sheet	
	Company Address enquiries to	MSDS Control Group Olin Brass and Winchester, Inc. 600 Powder Mill Road East Alton, IL 62024-1273 / USA Phone +1 618-258-3534 Fax +1 618-258-3393 Homepage www.winchester.com E-mail 8gauge@olin.com	JCP Construction Products Unit 14 Teddington Business Park Station Rd. Teddington TW11 9BQ Tel: +44 208 943 1800 Fax: +44 208 943 1140
	Technical information	8gauge@olin.com	www.jcpfixings.co.uk
	Safety Data Sheet	sdb@chemiebuero.de	jcpenquiries@owlett-jaton.com
1.4	Emergency telephone numb	er	
	Advisory body	Call NHS 111 or a doctor	+44 (0)208 943 1800
	Company	+45 49 76 54 00 Mo-Fr 8:00 h - 16:00 h	8.30am-5.00pm Monday to Friday

2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Expl. 1.4: H204 Fire or projection hazard.
Repr. 1A: H360Df May damage the unborn child. Suspected of damaging fertility.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.
Lact.: H362 May cause harm to breast-fed children.
Acute Tox. 3: H301+H311 Toxic if swallowed or in contact with skin.
Acute Tox. 4: H332 Harmful if inhaled.





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2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

	Hazard pictograms	
	Signal word	DANGER
	Contains:	Glycerol trinitrate
		Lead 2,4,6-trinitro-m-phenylene dioxide
	Hazard statements	H204 Fire or projection hazard. H360Df May damage the unborn child. Suspected of damaging fertility. H411 Toxic to aquatic life with long lasting effects. H362 May cause harm to breast-fed children. H301+H311 Toxic if swallowed or in contact with skin. H332 Harmful if inhaled.
	Precautionary statements	 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P250 Do not subject to grinding/shock/friction/ P264 Wash hands thoroughly after handling. P273 Avoid release to the environment. P370+P380 In case of fire: Evacuate area. P501 Dispose of contents/container in accordance with local/national regulation.
2.3	Other hazards	
	Human health dangers	The contained ingredients can be harmful to humans, but are hermetically enclosed in article and can not be released.
	Environmental hazards	Does not contain any PBT or vPvB substances.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance	
2 - 13 Cellulose nitrate		
	CAS: 9004-70-0, EINECS/ELINCS: 682-719-5	
	GHS/CLP: Expl. 1.1: H201	
0.5 - 2 Glycerol trinitrate		
CAS: 55-63-0, EINECS/ELINCS: 200-240-8, EU-INDEX: 603-034-00-x		
GHS/CLP: Acute Tox. 2: H300 H310 H330 - STOT RE 2: H373 - Aquatic Chronic 2: H411 - Unst. Expl.: H200		
0.5 - 1 Lead 2,4,6-trinitro-m-phenylene dioxide		
CAS: 15245-44-0, EINECS/ELINCS: 239-290-0, EU-INDEX: 609-019-00-4		
GHS/CLP: Unst. Expl.: H200 - Repr. 1A: H360Df - Acute Tox. 4: H302 H332 - STOT RE 2: H373 - Aquatic Acute H400 - Aquatic Chronic 1: H410		
Comment on component parts The contained dangerous materials are not freely available with foreseeable use.		

SVHC (Candidate List of Substances of Very High Concern for authorisation) ≥ 0.1% CAS 15245-44-0 - Lead 2,4,6-trinitro-m-phenylene dioxide The contained ingredients can be harmful to humans, but are hermetically enclosed in article and can not be released. For full text of H-statements: see SECTION 16.





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SECTION 4: First aid measures

4.1	Description of first aid measures	
	General information	Measures apply only to the damaged product.
Inhalation Ensure supply of fresh air. In the event of symptoms seek medical treatment.		
	Skin contact	In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.
	Eye contact	In case of contact with eyes rinse thoroughly and immediately with plenty of water and seek medical advice.
	Ingestion	Consult a doctor immediately.
4.2	Most important symptoms and eff	ects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1	Extinguishing media	
	Suitable extinguishing media	Foam, dry powder, water spray jet, carbon dioxide
	Extinguishing media that must not be used	Full water jet
5.2	Special hazards arising from the	substance or mixture
		Risk of formation of toxic pyrolysis products. Bursting Cartridges can be forcibly projected from a fire. Nitrogen oxides (NOx).
5.3	Advice for firefighters	
		Use self-contained breathing apparatus.
		Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
SEC	TION 6: Accidental release measu	res
6.1	Personal precautions, protective	equipment and emergency procedures

		Measures apply only to the damaged product. Remove persons to safety. Use personal protection (including gloves and a suitable dust mask).
6.2	Environmental precautions	
		Do not discharge into the drains/surface waters/groundwater.
6.3	Methods and material for contain	ment and cleaning up
		Take up mechanically. Avoid raising dust.
		Dispose of absorbed material in accordance within the regulations.
6.4	Reference to other sections	
		See SECTION 8+13





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SECTION 7: Handling and storage

7.1	Precautions for safe handling	
		Use only in well-ventilated areas.
		Handle with care - avoid shock, friction and impact.
		Keep away from open flames, hot surfaces and sources of ignition.
		Ground/bond container and receiving equipment.
		Do not eat, drink or smoke when using this product.
		Wash hands before breaks and after work.
7.2	Conditions for safe storage, inclu-	uding any incompatibilities
		Keep only in original container.
		Do not store with combustible materials.
		Do not store together with oxidizing agents.
		Store to in accordance with national regulation.
		Keep in a well-ventilated place.
		Protect from heat/overheating.
7.3	Specific end use(s)	

See product information.

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Substance
Glycerol trinitrate
CAS: 55-63-0, EINECS/ELINCS: 200-240-8, EU-INDEX: 603-034-00-x
Long-term exposure: 0,2 ppm, 1,9 mg/m ³
Short-term exposure (15-minute): 0,2 ppm, 1,9 mg/m ³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Glycerol trinitrate
CAS: 55-63-0, EINECS/ELINCS: 200-240-8, EU-INDEX: 603-034-00-x
Eight hours: 0,01 ppm, 0,095 mg/m ³ , skin
Short-term (15-minute): 0,02 ppm, 0,19 mg/m ³

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.	
Eye protection	Tightly fitting goggles. (EN 166:2001)	
Hand protection	Leather gloves. The details concerned are recommendations. Please contact the glove supplier for further information.	
Skin protection	Not required under normal conditions.	
Other	not applicable	
Respiratory protection	Not required under normal conditions.	
Thermal hazards	No information available.	
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.	





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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Cartridge
Color	not determined
Odor	odourless
Odour threshold	not applicable
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not applicable
Density [g/cm³]	not determined
Relative density	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not applicable
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not determined
Auto-ignition temperature	not applicable
Decomposition temperature [°C]	not applicable
Particle characteristics	not applicable
Other information	

9.2 Other information

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Shock / pressure: Risk of explosion

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition. Avoid bumps, friction and impact. Strong heating. Physical damage to containers; cartridges may detonate if case is punctured.

none





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10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

In the event of fire: See SECTION 5. Toxic gases/vapours. Toxic metal compounds.

SECTION 11: Toxicological information

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

Acute oral toxicity

Product ATE-mix, oral, 248 mg/kg

Substance

Glycerol trinitrate, CAS: 55-63-0

Acute dermal toxicity

Product ATE-mix, dermal, 250 mg/kg

 Substance

 Glycerol trinitrate, CAS: 55-63-0

 LD50, dermal, Rabbit, > 280 mg/kg (IUCLID)

Acute inhalational toxicity

Product	J
ATE-mix, inhalativ (dust), 2.46 mg/L	J

	Serious eye damage/irritation	Based on the available information, the classification criteria are not fulfilled.
	Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled.
	Respiratory or skin sensitisation	Based on the available information, the classification criteria are not fulfilled.
	Specific target organ toxicity — single exposure	Based on the available information, the classification criteria are not fulfilled.
	Specific target organ toxicity — repeated exposure	Based on the available information, the classification criteria are not fulfilled.
	Mutagenicity	Based on the available information, the classification criteria are not fulfilled.
	Reproduction toxicity	May damage the unborn child. Suspected of damaging fertility. Calculation method
	Carcinogenicity	Based on the available information, the classification criteria are not fulfilled.
	Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
	General remarks	
		Toxicological data of complete product are not available.
11.2	Information on other hazards	
	Endocrine disrupting properties	Contains no ingredients with endocrine-disrupting properties.
	Other information	none





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SECTION 12: Ecological information

12.1 Toxicity

Substance
Glycerol trinitrate, CAS: 55-63-0
LC50, (96h), Lepomis macrochirus, 1.38 mg/l (IUCLID)
EC50, (48h), Daphnia magna, 46 - 55 mg/l (IUCLID)

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not applicable

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

12.7 Other adverse effects

Ecological data of complete product are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

	Dispose of as hazardous waste. Coordinate disposal with the authorities if necessary.	
Waste no. (recommended)	160401* waste ammunition	
Contaminated packaging		
	Uncontaminated packaging may be taken for recycling.	
Waste no. (recommended)	150101	





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050				
L	TION 14: Transport information			
14.1	UN number or ID number			
	Transport by land according to ADR/RID	0014		
	Inland navigation (ADN)	0014		
	Marine transport in accordance with IMDG	0014		
	Air transport in accordance with IATA	0014		
14.2	UN proper shipping name			
	Transport by land according to ADR/RID	CARTRIDGES FOR WEAPONS, BLANK		
	- Classification Code	1.4S		
	- Label			
	- ADR LQ	5 kg		
	- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 4 (E)		
	Inland navigation (ADN)	CARTRIDGES FOR WEAPONS, BLANK		
	- Classification Code	1.4S		
	- Label			
	Marine transport in accordance with IMDG	Cartridges for tools, blank		
	- EMS	F-B, S-X		
	- Label			
	- IMDG LQ	5kg		
	Air transport in accordance with IATA	Cartridges for tools, blank		
	- Label			
14.3	Transport hazard class(es)			
	Transport by land according to ADR/RID	1		
	Inland navigation (ADN)	1		
	Marine transport in accordance with IMDG	1.4 S		
	Air transport in accordance with IATA	1.4 S		





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14.4	Packing group Transport by land according to ADR/RID	not applicable
	Inland navigation (ADN)	not applicable
	Marine transport in accordance with IMDG	not applicable
	Air transport in accordance with IATA	not applicable
14.5	Environmental hazards	
	Transport by land according to ADR/RID	yes
	Inland navigation (ADN)	yes
	Marine transport in accordance with IMDG	MARINE POLLUTANT
	Air transport in accordance with IATA	yes
14.6	Special precautions for user	

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

No information available.

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
	EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
	TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2022)
	NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP.
	- Observe employment restrictions for people	Observe employment restrictions for young people. Observe employment restrictions for mothers-to-be and nursing mothers.
	- VOC (2010/75/CE)	0%
15.2	Chemical safety assessment	
		not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.
H302+H332 Harmful if swallowed or if inhaled.
H360Df May damage the unborn child. Suspected of damaging fertility.
H200 Unstable explosives.
H411 Toxic to aquatic life with long lasting effects.
H373 May cause damage to organs through prolonged or repeated exposure.
H300+H310+H330 Fatal if swallowed, in contact with skin or if inhaled.
H201 Explosive; mass explosion hazard.





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16.2 Abbreviations and acronyms:	
	ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
	RID = Règlement concernant le transport international ferroviaire de marchandises
	dangereuses ADN = Accord européen relatif au transport international des marchandises dangereuses par
	voie de navigation intérieure
	ATE = acute toxicity estimate
	CAS = Chemical Abstracts Service
	CLP = Classification, Labelling and Packaging DMEL = Derived Minimum Effect Level
	DNEL = Derived No Effect Level
	EC50 = Median effective concentration
	ECB = European Chemicals Bureau EEC = European Economic Community
	EINECS = European Inventory of Existing Commercial Chemical Substances
	EL50 = Median effective loading
	ELINCS = European List of Notified Chemical Substances
	EmS = Emergency Schedules GHS = Globally Harmonized System of Classification and Labelling of Chemicals
	IATA = International Air Transport Association
	IBC-Code = International Code for the Construction and Equipment of Ships carrying
	Dangerous Chemicals in Bulk
	IC50 = Inhibition concentration, 50% IMDG = International Maritime Code for Dangerous Goods
	IUCLID = International Uniform ChemicaL Information Database
	IVIS = In vitro irritation score
	LC50 = Lethal concentration, 50%
	LD50 = Median lethal dose LC0 = lethal concentration, 0%
	LOAEL = lowest-observed-adverse-effect level
	LL50 = Median lethal loading
	LQ = Limited Quantities
	MARPOL = International Convention for the Prevention of Marine Pollution from Ships NOAEL = No Observed Adverse Effect Level
	NOEC = No Observed Effect Concentration
	PBT = Persistent, Bioaccumulative and Toxic substance
	PNEC = Predicted No-Effect Concentration
	REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals STP = Sewage Treatment Plant
	TLV \otimes /TWA = Threshold limit value – time-weighted average
	TLV®STEL = Threshold limit value – short-time exposure limit
	VOC = Volatile Organic Compounds vPvB = very Persistent and very Bioaccumulative
	VFVD = very Feisistent and very bloaccumulative
16.3 Other information	
Classification procedure	Expl. 1.4: H204 Fire or projection hazard. (On basis of test data) Repr. 1A: H360Df May damage the unborn child. Suspected of damaging fertility. (Calculation method)
	Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method) Lact.: H362 May cause harm to breast-fed children. (Calculation method) Acute Tox. 3: H301+H311 Toxic if swallowed or in contact with skin. (Calculation method)
	Acute Tox. 4: H332 Harmful if inhaled. (Calculation method)
Modified position	SECTION 3 been added: The concentrations of the ingredients are valid for Electrolyte. They are not for the complete system.
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