

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

SILVO Tarnish Guard Liquid

1.2. Relevant identified uses of the substance or mixture and uses advised against

Liquid impregnated onto wadding for cleaning household items including Silver, Gold, Aluminium, Chrome and Glass

1.3. Details of the Supplier of the Safety Data Sheet

The United Kingdom:

Reckitt Benckiser Wellcroft House Wellcroft Road Slough Berkshire SL1 4AQ

The Republic Of Ireland:

Reckitt Benckiser Ireland Ltd 7 Riverwalk Citywest Business Campus Dublin 24 Ireland

1.4 Emergency telephone number

Only available during the following office hours: 09:00 - 17:00 weekdays

UK Contact Telephone:	0845 769 7079	ROI Contact Telephone:	01 661 7318
Contact Email: consume	r.relations-ukroi@rb.c	om	

Revision Date:	Revision	Replacing	RB Ref No:
1 February 2015	5	6328528904 20 Feb 2013	6328528905

Revisions: CLP classification added

Additional useful information

Product Format: Bluish grey liquid

 (\mathbf{i})



SECTION 2: HAZARDS IDENTIFICATION					
2.4 Classification of the subs	anas ar mistura				
Product definition	2.1 Classification of the substance or mixture Product definition : Mixture				
	Regulation (EC) No. 1272/2008 [CLP/GHS]				
Eye Irrit. 2, H319					
Classification according to)irective 1999/45/EC [DPD]				
The product is not classified	as dangerous according to Directive 1999/45/EC and its amendments.				
Classification	: Not classified				
See Section 16 for the full tex	of the R phrases or H statements declared above.				
	ed information on health effects and symptoms.				
2.2 Label elements					
Hazard pictograms					
	$\langle ! \rangle$				
Signal word	: Warning				
Hazard statements Precautionary statements	: Causes serious eve irritation.				
General	: Keep out of reach of children.				
	If medical advice is needed, have product container or label at hand. Read label before use.				
Prevention	: Wear eye/face protection.				
Response	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact				
Response	lenses, if present and easy to do. Continue rinsing.				
	If eye irritation persists: Get medical advice/attention.				
	IF ON SKIN: Wash with plenty of soap and water. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.				
Storage	: Not applicable.				
Disposal	: Not applicable.				
Risk phrases	This product is not classified according to EU legislation.				
Safety phrases	: S2- Keep out of the reach of children.				
	S46- If swallowed, seek medical advice immediately and show this container or				
	label.				
Hazardous ingredients	: Not applicable				
(DPD)					
Hazardous ingredients	: propan-2-ol				
(CLP) Supplemental label	: Not applicable.				
elements (DPD)	. Not applicable.				
Supplemental label	: Not applicable.				
elements (CLP)					
Special packaging requirem	ents				
Containers to be fitted	: Not applicable.				
with child-resistant					
fastenings					
Tactile warning of danger	Not applicable.				
2.3 Other hazards					
Other hazards which do not result in classification	: None known.				



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture	: Mixture				
			Class	ification_	
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Jsopropyl alcohol	EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	10 - 15	F; R11 Xi; R36 R67	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 (Narcotic effects)	[1]
octadecane-1-thiol	EC: 220-744-1 CAS: 2885-00-9	< 2.5	Not classified	Àquatic Chronic 4, H413	[1]
calcium carbonate	EC: 207-439-9 CAS: 471-34-1	0.25 - 1	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
			See Section 16 for the full text of the R- phrases declared above.	See Section 16 for the full text of the H statements declared above.	

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed. Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[7] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid n	neasures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove dentures if any. Move to fresh air. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effec	ts
Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: Irritating to mouth, throat and stomach.
Over-exposure signs/symp	toms
Eye contact	 Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	No specific data.
Ingestion	: No specific data.
4.3 Indication of any immedi	ate medical attention and special treatment needed

Notes to physician : Freat symptomatically.

Specific treatments : No specific treatment.

SECTION 5: FIREFIGHTING MEASURES



5.1 Extinguishing media Suitable extinguishing media	Jse an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	None known.	
5.2 Special hazards arising f	he substance or mixture	
Hazards from the substance or mixture	n a fire or if heated, a pressure increase will occur and the container may bur	st.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide culfur oxides netal oxide/oxides	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incidence is a fire. No action shall be taken involving any personal risk or without suitable training.	ident if
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained preathing apparatus (SCBA) with a full face-piece operated in positive pressure node. Clothing for fire-fighters (including helmets, protective boots and glove conforming to European standard EN 469 will provide a basic level of protective themical incidents.	re es)

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, pro	te	ctive equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions		Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and materials for	r C	ontainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product.
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.



SECTION 7: HANDLING AND STORAGE

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures	:	Fut on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.		
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.		
7.2 Conditions for safe stora	ge,	including any incompatibilities		
Storage	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.		
7.3 Specific end use(s)				
Recommendations	:	Washing and cleaning products (including solvent based products) Consumer uses: Private households (= general public = consumers)		
Industrial sector specific solutions	:	Not available.		



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters	-specific information provided in the Exposure Scenario(s).
Occupational exposure lim	its
Product/ingredie	
Europe	
No exposure limit value know	vn.
Province de descrittories	
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedure for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Manufacturer: Exposure	
Appropriate engineering controls	 Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measured	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period Appropriate techniques should be used to remove potentially contaminated clothing Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard shoul be worn at all times when handling chemical products if a risk assessment indicate this is necessary. Considering the parameters specified by the glove manufactures check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
	Permeation level 6, Penetration level 3 following EN374, taking into consideration the exposure of chemicals given in chapter 3.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	 Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator.



Environmental exposure controls

 Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance		
Physical state	:	Liquid.
Colour	:	Bluish-grey. [Light]
Odour	:	Characteristic. [Slight]
Odour threshold	:	Not available.
pH	:	7 to 8.5
Melting point/freezing point	:	Not available.
Initial boiling point and	:	Not available.
boiling range		
Flash point		Not available.
Evaporation rate	5	Not available.
Flammability (solid, gas)	5	Not available.
Burning time	5	Not applicable.
Burning rate	5	Not applicable.
Upper/lower flammability or	÷	Not available.
explosive limits		
Vapour pressure		Not available.
Vapour density		Not available.
Density		1.075 to 1.2 g/cm ³ [20°C]
Solubility(ies)		Not available.
Partition coefficient: n-octanol/ water	÷	Not available.
		Neterailable
Decomposition temperature		Not available.
Viscosity		Kinematic (room temperature): 0.2 to 4 cm ² /s
Explosive properties		Not available.
Oxidising properties		Not available.
Corrosivity Remarks	÷	Not available.

9.2 Other information

No additional information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	specific test d	ata related to reactivity available for this product or its ingredients.
10.2 Chemical stability	e product is sta	able.
10.3 Possibility of hazardous reactions		nditions of storage and use, hazardous reactions will not occur. There are no data available on the mixture itself.
10.4 Conditions to avoid	specific data.	
10.5 Incompatible materials 10.6 Hazardous decomposition products		nousehold chemicals nposition products : carbon oxides , Various Organic chemicals.
Instability Conditions	t available.	
Instability temperature	t available.	



SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sopropyl alcohol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
calcium carbonate	LD50 Oral	Rat	6450 mg/kg	-

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
sopropyl alcohol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
calcium carbonate	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitisation

No known effect according to our database.

Mutagenicity

No known effect according to our database.

Carcinogenicity

No known effect according to our database.

Reproductive toxicity

No known effect according to our database.

Teratogenicity

No known effect according to our database.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Jsopropyl alcohol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

No known effect according to our database.

Aspiration hazard

No known effect according to our database.

Potential acute health effects

Eye contact	: Causes serious eye irritation.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: Irritating to mouth, throat and stomach.



Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	 Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Long term exposure		
Potential immediate effects	;	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ct	<u>s</u>
Not available.		
Conclusion/Summary	:	Not available.
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	:	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.
Other information	:	Not available.



SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Isopropyl alcohol calcium carbonate		Fish - Rasbora heteromorpha	48 hours 96 hours 96 hours
	water Chronic NOEC 61 mg/g Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	42 days

12.2 Persistence and degradability

No known effect according to our database.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
sopropyl alcohol	0.05	-	low
octadecane-1-thiol	9.12		high

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT	and vPvB assessment
PBT	: Not applicable.
vPvB	: Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment meth	ods
Product	
Methods of disposal	 Waste must be disposed of in accordance with federal, state and local environmental control regulations. Waste packaging should be recycled.
Hazardous waste	: The classification of the product may meet the criteria for a hazardous waste.
Packaging	
Methods of disposal	 The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

For long distance transport of bulk material or shrunk pallet take into consideration sections 7 and 10.



SECTION 15: REGULATORY INFORMATION

Chemical Safety Assessment following regulation 1907/2006/EC: Not relevant. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Integrated pollution : Listed prevention and control list (IPPC) - Air Integrated pollution : Not listed prevention and control list (IPPC) - Water CMR Substances None of the components are listed. : ZAppendix No. 4 Hazard class for water : Not applicable. 15.2 Chemical Safety Assessment



SECTION 16: OTHER INFORMATION

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number
Key literature references and sources for data	: Not available.

and sources for data

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Eye Irrit. 2, H319

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classi	ification Justification
Eye Irrit. 2, H319	Calculation method
Europe	
Full text of abbreviated H statements	 H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. (Narcotic effects) (Narcotic effects) H413 May cause long lasting harmful effects to aquatic life.
Full text of classifications [CLP/GHS]	Aquatic Chronic 4, H413 LONG-TERM AQUATIC HAZARD - Category 4 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 (Narcotic effects) LONG-TERM AQUATIC HAZARD - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Full text of abbreviated R phrases	: R11- Highly flammable. R36- Irritating to eyes. R36/38- Irritating to eyes and skin. R67- Vapours may cause drowsiness and dizziness.
Full text of classifications [DSD/DPD]	: F - Highly flammable Xi - Irritant

This document complements the technical usage instructions but does not replace them. The information contained herein is based on our best current knowledge if the product concerned, and is given in good faith. The attention of recipients is drawn to (amongst other things) the element of risk consequent to use of the product other than that for which it was intended.

In no way does this document remove the need of the recipient of the product to fully understand and apply statutory requirements. It is the recipient's sole responsibility to take due precautions relative to the use made of the product. All information contained herein is only to assist the recipient in fulfilling their statutory duty connected with the use of hazardous materials.

This Document may be entitled Product Safety Data Sheet as required by REACH (Registration, Evaluation, Authorisation and restriction of Chemicals) Annex II OR Product Data Information Sheet where a product is not required to be supported by a full REACH compliant SDS (e.g. not classified as hazardous or out of scope, such as cosmetics). Changes from the previous version are given in Section 1.

This list of information must not be considered as exhaustive, and does not exonerate the recipient from taking other precautions described in documents other than those mentioned, concerning the storage and use of the product, for which they remain the sole person responsible.