

Safety Data Sheet

Angel Guard – C4123

SDS Revision Date:

09/09/2019

1. Identification

1.1. Product identifier

Product Identity

Angel Guard – C4123

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

Intended use

Prevent silver tarnish

1.3. Details of the supplier of the safety data sheet

Company Name

Angel Gilding
1945 Gardner Rd.
Broadview IL 60155 USA

Emergency

24 hour Emergency Telephone

708-383-3340

Customer Service: Angel Gilding

708-383-3340

2. Hazard(s) identification

Label elements



Signal word WARNING

GHS Ratings

GHS08 H351 Suspected of causing cancer.
GHS07 2A H319 Causes serious eye irritation.

GHS Hazards

H319 Causes serious eye irritation
H351 Suspected of causing cancer

GHS Precautions

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P281 Use personal protective equipment as required.
P305+P351+P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention
P337+P313 If eye irritation persists: Get medical advice/attention.

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Dispose of contents/container in accordance with Local, State and Federal Regulations

3. Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS number	Weight Concentration
2-butoxyethanol	111-76-2	<10%
tetrachloroethylene	127-18-4	<10%
2-(2-butoxyethoxy)ethanol	112-34-5	<10%

4. First aid measures

· **Description of first aid measures**

· **General information:** No special measures required.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Immediately rinse with water. If skin irritation is experienced, consult a doctor.

· **After eye contact:** Protect unharmed eye. Remove contact lenses if worn, if possible. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Rinse out mouth and then drink plenty of water. Do not induce vomiting; Immediately call for medical help.

· **Information for doctor:**

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

· Headache

· Dizziness

· Irritant to eyes.

· May cause gastro-intestinal irritation if ingested. Nausea in case of ingestion.
Unconsciousness

· **Danger**

May be harmful in contact with skin. May be harmful if inhaled.

Vapors have narcotic effect. May cause neurotoxic effects. Suspected of causing cancer.

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

Contains perchloroethylene, PERC. Consult literature for specific antidotes.

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5. Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** None.
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device. Wear fully protective suit.
- **Additional information** No further relevant information available.

6. Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation.
Wear protective clothing.
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.
Send for recovery or disposal in suitable receptacles.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

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7. Handling and storage

- **Handling:**
- **Precautions for safe handling** Use only in well ventilated areas. Prevent formation of aerosols. Avoid splashes or spray in enclosed areas.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location. Provide ventilation for receptacles.
- **Information about storage in one common storage facility:**
Store away from foodstuffs. Store away from oxidizing agents.
- **Further information about storage conditions:** Keep containers tightly sealed.

8. Exposure controls and personal protection

· Components with limit values that require monitoring at the workplace:	
111-76-2 2-butoxyethanol	
PEL (USA)	Long-term value: 240 mg/m ³ , 50 ppm Skin
REL (USA)	Long-term value: 24 mg/m ³ , 5 ppm Skin
TLV (USA)	Long-term value: 97 mg/m ³ , 20 ppm BEI
EL (Canada)	Long-term value: 20 ppm
EV (Canada)	Long-term value: 20 ppm Skin
LMPE (Mexico)	Long-term value: 20 ppm A3, IBE
127-18-4 tetrachloroethylene	
PEL (USA)	Long-term value: 100 ppm Ceiling limit value: 200; 300* ppm *5-min peak in any 3 hrs
REL (USA)	Minimize workplace exp. concs.; Pocket Guide App. A
TLV (USA)	Short-term value: 685 mg/m ³ , 100 ppm Long-term value: 170 mg/m ³ , 25 ppm BEI
EL (Canada)	Short-term value: 100 ppm Long-term value: 25 ppm IARC 2A
EV (Canada)	Short-term value: 100 ppm Long-term value: 25 ppm
LMPE (Mexico)	Short-term value: 100 ppm Long-term value: 25 ppm A3, IBE

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112-34-5 2-(2-butoxyethoxy)ethanol	
TLV (USA)	Long-term value: 67.5* mg/m ³ , 10* ppm *Inhalable fraction and vapor

Ingredients with biological limit values:	
111-76-2 2-butoxyethanol	
BEI (USA)	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis
127-18-4 tetrachloroethylene	
BEI (USA)	3 ppm Medium: end-exhaled air Time: prior to shift Parameter: Tetrachloroethylene 0.5 mg/L Medium: blood Time: prior to shift Parameter: Tetrachloroethylene

Chemical Name/CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
n-Butyl acetate 123-86-4	150 ppm TWA; 710 mg/m ³ TWA	200 ppm STEL 150 ppm TWA	NIOSH: 150 ppm TWA; 710 mg/m ³ TWA 200 ppm STEL; 950 mg/m ³ STEL
Xylenes (o-, m-, p-isomers) 1330-20-7	100 ppm TWA; 435 mg/m ³ TWA	150 ppm STEL 100 ppm TWA	Not established
Ethylbenzene 100-41-4	100 ppm TWA; 435 mg/m ³ TWA	20 ppm TWA Not established	N NIOSH: 100 ppm TWA; 435 mg/m ³ TWA 125 ppm STEL; 545 mg/m ³ STEL

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Engineering controls: No further relevant information available.

Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device in case of insufficient ventilation.

For large spills, respiratory protection may be advisable.

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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.

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.

- **Eye protection:** Safety glasses

- **Body protection:**

Not required under normal conditions of use. Protection may be required for spills.

- **Limitation and supervision of exposure into the environment** Avoid release to the environment.

- **Risk management measures** See Section 7 for additional information.

9. Physical and chemical properties

Form	Liquid	Auto igniting:	Product is not self-igniting.
Color	Yellow	Odor Threshold:	Not applicable
Odor	Characteristic	Danger of explosion	Product does not present an explosion hazard.
pH Value	Not determined.	Explosion limits:	
Melting Point:	Undetermined.	Upper	Not determined.
Boiling Range:	148 °C (298 °F)	Lower	Not determined.
Flash Point:	Not applicable	Vapor pressure:	Not determined.
Flammability	Not applicable	Density	Not determined.
Evaporation Rate:	Slower than ether	Relative density	Not determined.
Autoignition Temperature	Not determined.	Vapor density	Not determined.
Decomposition temperature:	Not determined.	Evaporation rate	Not determined.
Solubility in / Miscibility with Water:	Fully miscible		

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10. Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Heating may cause release of toxic fumes.
- **Possibility of hazardous reactions**
Reacts with strong acids and oxidizing agents.
Toxic fumes may be released if heated above the decomposition point.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide Phosgene
Hydrogen chloride (HCl) Chlorine

11. Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
111-76-2 2-butoxyethanol		
Oral	LD50	1480 mg/kg (rat)
Dermal Inhalative	LD50	400 mg/kg (rab)
	LC50/4h	450 ppm (rat)
127-18-4 tetrachloroethylene		
Oral	LD50	2629 mg/kg (rat)

- **Primary irritant effect:**
 - **on the skin:** Causes mild skin irritation.
 - **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:** Suspected of causing cancer.
- **Additional toxicological information:**
Irritant
0 percent of the mixture consists of ingredient(s) of unknown toxicity.
- **Carcinogenic categories**

· NTP (National Toxicology Program)		
127-18-4	tetrachloroethylene	R

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12. Ecological information

· **Toxicity**

· **Aquatic toxicity:** The product contains materials that are harmful to the environment.

· **Persistence and degradability** Moderately /partly biodegradable

· **Behavior in environmental systems:**

· **Bioaccumulative potential** May be accumulated in organism

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

· **Additional ecological information:**

· **General notes:**

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.

· **Other adverse effects** No further relevant information available.

13. Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

14. Transport information

	DOT	IMDG	IATA
14.1 UN/ID	Not Regulated	Not Regulated	Not Regulated
14.2 Proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3 Hazard Class	Not Regulated	Not Regulated	Not Regulated

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15. Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
All ingredients are listed.
· TSCA (Toxic Substances Control Act):
All ingredients are listed.

Proposition 65 (California)

· Chemicals known to cause cancer:
127-18-4 tetrachloroethylene
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients are listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
· Chemicals known to cause developmental toxicity:
None of the ingredients is listed.

- **Carcinogenic categories**

· EPA (Environmental Protection Agency)		
111-76-2	2-butoxyethanol	NL
127-18-4	tetrachloroethylene	L
· IARC (International Agency for Research on Cancer)		
111-76-2	2-butoxyethanol	3
127-18-4	tetrachloroethylene	2A
· TLV (Threshold Limit Value established by ACGIH)		
111-76-2	2-butoxyethanol	A3
127-18-4	tetrachloroethylene	A3
· NIOSH-Ca (National Institute for Occupational Safety and Health)		
127-18-4	tetrachloroethylene	
· State Right to Know Listings		
None of the ingredients is listed.		

Canadian substance listings

· Canadian Domestic Substances List (DSL)		
All ingredients are listed.		
· Canadian Ingredient Disclosure list (limit 0.1%)		
None of the ingredients is listed.		
· Canadian Ingredient Disclosure list (limit 1%)		
111-76-2	2-butoxyethanol	
127-18-4	tetrachloroethylene	
112-34-5	2-(2-butoxyethoxy)ethanol	

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· **Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

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

<h3>16. Other information</h3>

Prepared By
Revision Date

Product Stewardship
September 10, 2019

Disclaimer

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier's knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

End of Safety Data Sheet