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1. Identification

1.1. Product identifier

Product Identity Pouring Silver Reducer Concentrate – C1147

Alternate Names Pouring Silver Reducer Concentrate – C1147

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

Intended use Commercial mirroring.

1.3. Details of the supplier of the safety data sheet

Company Name Angel Gilding

619 Clarence Ave.

Oak Park IL 60604 USA

Emergency

24 hour Emergency Telephone No.708-383-3340Customer Service: Angel Gilding708-383-3340

2. Hazard(s) identification

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements

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3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations		Weight %	GHS Classification	Notes
D-Glucose CAS Number:	0000050-99-7	1 - 5	Not Classified	[1]
Sucrose CAS Number:	0000057-50-1	1 - 5	Not Classified	[1][2]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation Not applicable

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

Skin Not applicable Ingestion Not applicable

4.2. Most important symptoms and effects, both acute and delayed

Overview No known health effects

5. Fire-fighting measures

5.1. Extinguishing media

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

5.3. Advice for fire-fighters

Slightly flammable to flammable in presence of heat.

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^[1] Substance classified with a health or environmental hazard.

^[2] Substance with a workplace exposure limit.

^[3] PBT-substance or vPvB-substance.

^{*}The full texts of the phrases are shown in Section 16.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. For larger spills, use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Strong acids and oxidizing agents.

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000050-99-7	D-Glucose	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000057-50-1 Sucrose		OSHA	TWA 15 mg/m3 (total) TWA 5 mg/m3 (resp)
		ACGIH	TWA: 10 mg/m3
		NIOSH	TWA 10 mg/m3 (total) TWA 5 mg/m3 (resp)
		Supplier	No Established Limit

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8.2. Exposure controls

Respiratory If workers are exposed to concentrations above the exposure limit they must use the

appropriate, certified respirators.

Eyes Safety glasses recommended **Skin** Protective gloves recommended.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the

use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

9. Physical and chemical properties

Appearance White Solid Odor Characteristic **Odor threshold** Not determined Ha Not Measured Melting point / freezing point Not Measured Initial boiling point and boiling range Not Measured **Flash Point** Not Measured **Evaporation rate (Ether = 1)** Not Measured Flammability (solid, gas) Not Applicable

Upper/lower flammability or explosive limits Lower Explosive Limit: Not Measured

Upper Explosive Limit: Not Measured

Vapor pressure (Pa) Not Measured **Vapor Density** Not Measured **Specific Gravity** Not Measured Solubility in Water Not Measured Partition coefficient n-octanol/water (Log Kow) Not Measured **Auto-ignition temperature** Not Measured **Decomposition temperature** Not Measured Viscosity (cSt) Not Measured

9.2. Other information

No other relevant information.

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10. Stability and reactivity

10.1. Reactivity

Reactive with sulfuric acid, nitric acid, and oxidizers.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Excess heat, incompatible materials.

10.5. Incompatible materials

Strong acids and oxidizing agents.

10.6. Hazardous decomposition products

No hazardous decomposition data available.

11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
D-Glucose - (50-99-7)	No data available	No data available	No data available	No data available	No data available
Sucrose - (57-50-1)	No data available	No data available	No data available	No data available	No data available

Carcinogen Data

CAS No.	Ingredient	Source	Value		
0000050-99-7 D-Glucose		OSHA	Regulated Carcinogen: No		
		NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		
0000057-50-1 Sucrose		OSHA	Regulated Carcinogen: No		
		NTP	Known: No; Suspected: No		
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;		

Classification	Category	Hazard Description		
Acute toxicity (oral)		Not Applicable		
Acute toxicity (dermal)		Not Applicable		

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Acute toxicity (inhalation)	 Not Applicable
Skin corrosion/irritation	 Not Applicable
Serious eye damage/irritation	 Not Applicable
Respiratory sensitization	 Not Applicable
Skin sensitization	 Not Applicable
Germ cell mutagenicity	 Not Applicable
Carcinogenicity	 Not Applicable
Reproductive toxicity	 Not Applicable
STOT-single exposure	 Not Applicable
STOT-repeated exposure	 Not Applicable
Aspiration hazard	 Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
D-Glucose - (50-99-7)	Not Available	Not Available	Not Available
Sucrose - (57-50-1)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

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14. Transport information

DOT (Domestic Surface

DOT Hazard Class: Not

Transportation)

Not Applicable

Not Regulated

Not Applicable

Applicable

14.1. UN number 14.2. UN proper shipping

name

14.3. Transport hazard

class(es)

14.4. Packing group

14.5. Environmental hazards

IMDG Marine Pollutant: No;

14.6. Special precautions for user

No further information

IMO / IMDG (Ocean **Transportation**)

Not Regulated Not Regulated

IMDG: Not Applicable

Sub Class: Not Applicable

Not Applicable Not Applicable

ICAO/IATA

Not Regulated

Not Regulated

Air Class: Not Applicable

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance Control Act (TSCA)

US EPA Tier II Hazards

Inventory. **WHMIS 1988**

Classification

Not Regulated

Fire: No

Sudden Release of Pressure: No

Reactive: No.

All components of this material are either listed or exempt from listing on the TSCA

Immediate (Acute): No Delayed (Chronic): No

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

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