# SAFETY DATA SHEET Ketchum



RWG235557

### **Section 1. Identification**

**GHS** product identifier : LIQUID GREEN

**Product type** : Liquid. SDS# : 8bfv:83cs:8j8

### Relevant identified uses of the substance or mixture and uses advised against

Printing ink or additive.

Uses advised against Reason Not applicable.

Supplier's details : Ketchum Manufacturing

> 1245 California Avenue Brockville, ON K6V 7N5

Canada

**Emergency telephone** number (with hours of

operation)

For Product Questions during business hours call: (514) 731-9405 For Health and Safety Questions during business hours: (734) 781-4600 24 Hour Emergency Spill Contact call: (800) 424-9300 Chemtrec (US/Canada)

### Section 2. Hazards identification

**OSHA/HCS** status

: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

**GHS label elements** 

Signal word : No signal word.

: No known significant effects or critical hazards. **Hazard statements** 

**Precautionary statements** 

**Prevention** : Not applicable. Response : Not applicable. **Storage** : Not applicable. : Not applicable. **Disposal** Hazards not otherwise : None known.

classified

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### Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
propan-2-ol disodium tetraborate decahydrate	1 - 5 .1 - 1	67-63-0 1303-96-4

The specific chemical identity and/or exact percantage (concentration) of composition has been withheld as a trade secret.

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 and hence require reporting in this section.

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

### Section 4. First aid measures

### **Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours.

**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 victim to fresh air and keep at rest in a position

comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact**: No known significant effects or critical hazards.

**Inhalation**: Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Skin contact : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

#### **Over-exposure signs/symptoms**

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**: No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

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### Section 5. Fire-fighting measures

#### **Extinguishing media**

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

halogenated compounds metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

### Personal precautions, protective 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 spilled material. 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".

**Environmental precautions** 

: Avoid dispersal of spilled 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).

#### Methods and materials for containment 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. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

#### Precautions for safe handling

Protective measures

Advice on general
occupational hygiene

- : Put on appropriate personal protective equipment (see Section 8).
- : 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.

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### Section 7. Handling and storage

including any incompatibilities

Conditions for safe 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Section 8. Exposure controls/personal protection

#### **Control parameters**

Occupational exposure limits

Ingredient name	Exposure limits
propan-2-ol	ACGIH TLV (United States, 3/2012).  STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours.  NIOSH REL (United States, 6/2009).  STEL: 1225 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 980 mg/m³ 10 hours. TWA: 400 ppm 10 hours.  OSHA PEL (United States, 6/2010). TWA: 980 mg/m³ 8 hours. TWA: 400 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989).  STEL: 1225 mg/m³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 980 mg/m³ 8 hours. TWA: 980 mg/m³ 8 hours. TWA: 980 mg/m³ 8 hours.
disodium tetraborate decahydrate	ACGIH TLV (United States, 3/2012).  STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction  TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction  NIOSH REL (United States, 6/2009).  TWA: 5 mg/m³ 10 hours.  OSHA PEL 1989 (United States, 3/1989).  TWA: 10 mg/m³ 8 hours.

### **Appropriate engineering** controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

#### **Individual protection measures**

**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: safety glasses with sideshields.

### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

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# Section 8. Exposure controls/personal protection

**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 product and the safe working limits of the selected respirator.

# Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid. Color Green.

Odor : Not available.

: No applicable information is available. **Odor threshold** 

: Not available.

No applicable information is available. : No applicable information is available.

**Boiling point** 

: Higher than 93.3°C (200°F). Flash point

: No applicable information is available. **Evaporation rate** 

Flammability (solid, gas) : Not available. Lower and upper explosive

: Not available.

(flammable) limits

: No applicable information is available.

Vapor density : Not available. Relative density : Not available. Solubility : Not available.

Partition coefficient: n-

octanol/water

Vapor pressure

No applicable information is available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** 

: No applicable information is available. **Viscosity** : No applicable information is available.

**Density** : 910 g/l / 7.59 lbs/gal

**VOC data** 

50.1 % by weight 45.6 % by volume 456.3 g/l / 3.8 lbs/gal

593.5 g/l / 5 lbs/gal [With volume exclusion [water excluded]]

### Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

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# Section 10. Stability and reactivity

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### **Section 11. Toxicological information**

### Information on toxicological effects

### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
propan-2-ol	LD50 Dermal LD50 Oral	Rabbit Rat	12800 mg/kg 5045 mg/kg	-

#### **Carcinogenicity**

### Classification

Product/ingredient name	OSHA	IARC	NTP
propan-2-ol	-	3	-

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
propan-2-ol	Category 3	Not applicable.	Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on the likely routes of exposure

/

: Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

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 : Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

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### Section 11. Toxicological information

Potential immediate

effects

: Not available.

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Potential delayed effects : Not available.

Potential chronic health effects

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.

### **Section 12. Ecological information**

### **Toxicity**

Product/ingredient name	Result	Species	Exposure
	,		48 hours 96 hours

#### Persistence and degradability

Not available.

### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
propan-2-ol	0.05	-	low

### **Mobility in soil**

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

### Section 13. Disposal considerations

### **Disposal methods**

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

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# **Section 14. Transport information**

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not applicable.	Not applicable.	Not applicable.	Not applicable.
UN proper shipping name				
Transport hazard class(es)				
Packing group				
Environmental hazards				
Additional information				

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

# Section 15. Regulatory information

**U.S. Federal regulations** 

United States inventory (TSCA 8b): At least one component is not listed.

**SARA 311/312** 

Classification : Not applicable.

**SARA 313** 

Product name	CAS number	%
		9.06 2.3566
	1328-53-6 67-63-0	9.06 2.3566

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations** 

### **Section 16. Other information**

**History** 

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Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

▼ Indicates information that has changed from previously issued version.

### **Notice to reader**

Flint Group has prepared this Safety Data Sheet ("SDS") in compliance with 29 CFR 1910.1200, understands that its customers may use this SDS to comply with that section, and believes that the data set forth herein are accurate as of the date hereof; however, this SDS shall not constitute a warranty with respect thereto.

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