Safety Data Sheet FLASH II

Supercedes Date 07/31/2015 **Issuing Date** 10/18/2016

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name FLASH II
Recommended use Disinfectants and general biocidal products
Information on Manufacturer
CERTIFIED LABS, DIV. OF NCH CORP.
BOX 152170
IRVING, TEXAS 75015

Product Code 5308
Chemical nature Aerosol
Emergency Telephone Number
CHEMTREC® 800-424-9300
Telephone inquiry
972-579-2477

2. HAZARD IDENTIFICATION

Color White **Physical state** Liquid **Odor** Citrus - Slight Ammonia

GHS
Classification
Physical Hazards

Flammable Aerosols	Category 2
Gases under pressure	Liquefied gas

Health Hazard

Serious Eye Damage/Eye Irritation	Category 2B

Other hazards
None

Labeling
Signal Word
DANGER

Hazard statements
H223 - Flammable aerosol
H280 - Contains gas under pressure; may explode if heated
H320 - Causes eye irritation

Precautionary Statements
P210 - Keep away from heat, sparks, open flames or hot surfaces.
P211 - Do not spray on an open flame or other ignition source
P251 - Pressurized container: Do not pierce or burn, even after use
P410 + P403 - Protect from sunlight. Store in a well-ventilated place
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists, get medical attention.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
2-Butoxyethanol	111-76-2	7-13
Petroleum gases, liquified, sweetened	68476-86-8	5-10
Isopropyl alcohol	67-63-0	3-7
Potassium hydroxide	1310-58-3	1-5
Ethylenediaminetetraacetic acid	60-00-4	1-5

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

General advice Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.
Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
Skin Contact Wash off immediately with plenty of water. Call a physician if irritation develops or persists.
Inhalation Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. If symptoms persist, call a physician.
Ingestion Drink plenty of water. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point No data available **Method** No data available
Flammability Limits in Air %: Mixture. **Upper:** 9.5 **Lower:** 1.8
Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Specific hazards arising from the chemical
Material can create slippery conditions.
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.
Aerosol Level (NFPA 30B) - 1

NFPA	**Health** 1	**Flammability** 0	**Instability** 1
HMIS	**Health** 1	**Flammability** 0	**Instability** 1

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Prevent further leakage or spillage if safe to do so.
Environmental Precautions Do not flush into surface water or sanitary sewer system.
Methods for Containment Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
Methods for Cleaning Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Neutralizing Agent Not applicable.

7. HANDLING AND STORAGE

Handling Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas.
Storage Keep away from heat and sources of ignition. Keep in a dry, cool and well-ventilated place.
Storage Temperature **Minimum** No data available **Maximum** No information available
Storage Conditions **Indoor** X **Outdoor** **Heated** **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
2-Butoxyethanol	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3 Skin	700 ppm TWA: 5 ppm TWA: 24 mg/m^3
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 980 mg/m^3	2000 ppm STEL 500 ppm STEL 1225 mg/m^3 TWA: 400 ppm TWA: 980 mg/m^3
Potassium hydroxide	Ceiling: 2 mg/m^3	No data available	Ceiling: 2 mg/m^3

Engineering Measures Ensure adequate ventilation, especially in confined areas.
Personal Protective Equipment
Eye/Face Protection Safety glasses with side-shields.
Skin Protection Wear suitable protective clothing, Impervious gloves.
Respiratory Protection In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
General Hygiene Considerations Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	**Viscosity**	Non viscous
Color	White	**Odor**	Citrus - Slight Ammonia
Odor Threshold	Not applicable	**Appearance**	Hazy - Cloudy
pH	12.3	**Specific Gravity**	1.00
Evaporation Rate	<1 (Butyl acetate=1)	**Percent Volatile (Volume)**	>80
VOC Content (%)	16	**VOC Content (g/L)**	160
Vapor Pressure	17.5 mmHg @ 77°F	**Vapor Density**	<1 (Air = 1.0)
Solubility	Soluble	**n-Octanol/Water Partition**	No data available
Melting Point/Range	No data available	**Decomposition Temperature**	No data available
Boiling Point/Range	100 °F / 38 °C	**Flammability (solid, gas)**	No data available
Flash Point	No data available	**Method**	No data available
Autoignition Temperature	No information available.		
Flammability Limits in Air %:	Mixture	**Upper:** 9.5 **Lower:** 1.8	

10. STABILITY AND REACTIVITY

Chemical Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames, and sparks.
Incompatible Products	Strong oxidizing agents, Strong acids, Strong bases.
Decomposition Temperature	No data available
Hazardous Decomposition Products	Carbon oxides.
Possibility of Hazardous Reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information — No information available.

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50	22,611.12
Dermal LD50	10,583.93
Inhalation LC50	
Gas	21,648.95
Mist	105.29
Vapor	105.29

Principle Route of Exposure	Skin contact, Eye contact, Inhalation.
Primary Routes of Entry	Skin contact, Skin Absorption, Ingestion.
Acute Effects:	
Eyes	Causes eye irritation.
Skin	May be absorbed through the skin in harmful amounts. May cause skin irritation.
Inhalation	May cause irritation of respiratory tract. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Inhalation of vapors in high concentration can cause narcotic effects and metabolic acidosis.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic Toxicity	Prolonged exposure can be harmful for certain organs, e.g. liver, kidneys, blood, nervous system and skin.
Target Organ Effects	Liver, Kidney, Central nervous system, Eyes, Skin, Respiratory system, Blood, Lymphatic System.
Aggravated Medical Conditions	Respiratory disorders, Skin disorders, Liver disorders, Kidney disorders, Neurological disorders, Blood disorders.

Component Information

Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h	No data available	No data available
Isopropyl alcohol 67-63-0	= 1870 mg/kg (Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m^3 (Rat) 4 h	No data available	No data available
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	no data available	No data available	No data available	No data available
Ethylenediaminetetraacetic acid 60-00-4	= 1700 mg/kg (Rat)	no data available	No data available	No data available	No data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
2-Butoxyethanol 111-76-2	No data available	No data available	No data available	No data available	Blood; Hematopoietic System; Skin; Central nervous system; Eyes; Respiratory system; Liver; Kidney
Isopropyl alcohol 67-63-0	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system
Potassium hydroxide	No data available	No data available	No data available	No data available	Skin; Eyes; Respiratory system

1310-58-3					

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Other
2-Butoxyethanol 111-76-2	A3	Group 3	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	Partition coefficien
2-Butoxyethanol	No information available.	LC50 = 1490 mg/L Lepomis macrochirus 96 h LC50 = 2950 mg/L Lepomis macrochirus 96 h	No information available	1000: 48 h Daphnia magna mg/L EC50	0.81
Petroleum gases, liquified, sweetened	No information available.	No information available.	No information available	No information available.	2.8
Isopropyl alcohol	EC50 > 1000 mg/L Desmodesmus subspicatus 96 h EC50 > 1000 mg/L Desmodesmus subspicatus 72 h	LC50 = 9640 mg/L Pimephales promelas 96 h LC50 = 11130 mg/L Pimephales promelas 96 h LC50 > 1400000 µg/L Lepomis macrochirus 96 h	EC50 = 35390 mg/L 5 min	13299: 48 h Daphnia magna mg/L EC50	0.05
Potassium hydroxide	No information available.	No information available.	No information available	No information available.	0.83
Ethylenediaminetetraacetic acid	EC50 = 1.01 mg/L Desmodesmus subspicatus 72 h	LC50 34 - 62 mg/L Lepomis macrochirus 96 h LC50 44.2 - 76.5 mg/L Pimephales promelas 96 h	No information available	113: 48 h Daphnia magna mg/L EC50 Static	N/A

Persistence and Degradability No information available.
Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.
Container Disposal Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT
Proper Shipping Name Consumer commodity
Hazard Class ORM-D
Description Consumer commodity,ORM-D,

TDG
Proper shipping name Aerosols
Hazard Class 2.2
UN-No UN1950
Description AEROSOLS,2.2,UN1950, LTD QTY

ICAO
UN-No UN1950
Proper Shipping Name Aerosols
Hazard Class 2.2
Shipping Description UN1950,Aerosols, 2.2, LTD QTY

IATA
UN-No UN1950
Proper Shipping Name Aerosols, non-flammable, LTD QTY
Hazard Class 2.2
ERG-Code 2L
Shipping Description UN1950,Aerosols, non-flammable,2.2, LTD QTY

IMDG/IMO
Proper Shipping Name Aerosols

Hazard Class	2
UN-No	UN1950
EmS No.	F-D, S-U
Description	UN1950, Aerosols,2, LTD QTY

15. REGULATORY INFORMATION

Inventories

TSCA	Complies
DSL	Complies

U.S. Federal Regulations

FIFRA

This chemical is a pesticide product registered by the US EPA and is subject to certain labeling requirements under federal pesticide laws. These requirements differ from the classification criteria and hazard information required for SDSs, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION
Causes moderate eye irritation.
Harmful if swallowed or absorbed through skin.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	No	No	Yes	No

CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
Potassium hydroxide	1000 lb	Not applicable
Ethylenediaminetetraacetic acid	5000 lb	Not applicable

16. OTHER INFORMATION

Prepared By	Adrienne McKee
Supercedes Date	07/31/2015
Issuing Date	10/18/2016
Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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