

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Cynamic Whirl HD

Other means of identification

Product Code X001393
UN/ID No UN1993
Document 001393CG5/ 001393CG15

Recommended use of the chemical and restrictions on use

Recommended use Citrus Fortified Laundry Detergent

Details of the supplier of the safety data sheet

Distributor
 Cynamic Chemical
 1472 Louis Bork Drive
 Batavia, IL 60510

Emergency telephone number

24 Hour Emergency Phone Number INFOTRAC: 1-800-535-5053 (NORTH AMERICA)

Company Phone Number 1-352-323-3500 (INTERNATIONAL)
 630-761-8770

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)


Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Flammable liquids	Category 3

Label elements

Emergency Overview

Warning

Hazard Statements
 Causes serious eye irritation
 May cause an allergic skin reaction
 Flammable liquid and vapor



Appearance Transparent **Physical state** Liquid **Odor** Citrus

Precautionary Statements - Prevention

- Avoid breathing dust/fume/gas/mist/vapors/spray
- Contaminated work clothing should not be allowed out of the workplace
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

- Immediately call a POISON CENTER or doctor/physician

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

- If skin irritation or rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed
- Causes mild skin irritation
- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

Unknown Acute Toxicity 16.0015% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Name	CAS-No	Weight-%	Trade Secret
2-Butoxyethanol	111-76-2	1% - 10%	*
Naphtha (petroleum), heavy alkylate	64741-65-7	1% - 5%	*
D-Limonene	5989-27-5	1% - 5%	*

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

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice

Show this safety data sheet to the doctor in attendance.

Eye contact

Immediately flush eye with plenty of cool, running water. Remove contact lenses if applicable, and continue flushing for at least 15 minutes, holding eyelids apart to ensure thorough rinsing of the entire eye. GET IMMEDIATE MEDICAL ATTENTION.

Skin contact	Remove any contaminated clothing and wash before re-use. Wash with water for 10-15 minutes.
Inhalation	If qualified give oxygen or artificial respiration as needed.
Ingestion	DO NOT induce vomiting. Give large amounts of water if victim is conscious. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Protection of First-aiders	Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Most important symptoms/effects, acute and delayed

Main Symptoms The most important known symptoms and effects are described in the labelling in section 2 and/or in section 11.

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

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Carbon dioxide (CO₂). Dry chemical. Alcohol-resistant foam.

Unsuitable Extinguishing Media This product contains alcohols which will reduce the effectiveness of normal foam. Use alcohol-resistant foam instead.

Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Avoid contact with the skin and the eyes. Use personal protective equipment. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
Other information	After this product is diluted for use according to the label directions, it may be safely flushed to a sanitary sewer.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Small spills: Flush to sanitary sewer. Mop up residue and rinse area thoroughly with water. Large spills: Dike or dam spill. Pump to containers or soak up on inert absorbent. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Wash thoroughly after work using soap and water. KEEP OUT OF REACH OF CHILDREN. Wash thoroughly after handling. Store away from sources of ignition. .

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Store in a cool, well-ventilated area. Avoid overheating or freezing. Wash thoroughly after handling. Keep out of reach of children. Spilled material is slippery.

Incompatible products Acids. Oxidizers .

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Review Section 3 & 4 for Exposure Guidelines.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering Measures Ensure adequate ventilation, especially in confined areas

Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash-proof chemical goggles or face shield.

Skin and body protection Solvent-resistant apron and boots. Solvent-proof gloves.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures Do not eat, drink or smoke when using this product. Practice good personal hygiene. Wash after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state	Liquid	Odor	Citrus
Appearance	Transparent	Odor Threshold	No information available
Color	Green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Methods</u>
pH	10 ± 0.5	
Melting/freezing point	No information available	

Boiling point/boiling range	~ 100 °C / 212 °F	Estimated
Flash Point	> 55 °C / > 130 °F	TCC
Evaporation rate	Similar to water	Similar to water
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limit	No information available	
Lower flammability limit	No information available	
Vapor pressure	NE	
Vapor density	NE	
Specific Gravity	1.042 +/- 0.005	
Water solubility	Completely soluble.	Completely soluble.
Solubility in other solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Viscosity, dynamic	No information available	
Explosive properties	May form explosive mixtures with air	
Oxidizing Properties	Not an oxidizer	

Other information

Softening point	N/A
Molecular Weight	N/A
VOC Content(%)	< 20%
Density VALUE	N/A
Bulk Density VALUE	N/A

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Acids. Oxidizers

Hazardous Decomposition Products

On burning carbon monoxide and dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Harmful by inhalation Causes serious eye irritation May cause an allergic skin reaction
Inhalation	Vapors may irritate throat and respiratory system. May cause central nervous system depression with nausea, headache, dizziness, and incoordination. Harmful by inhalation.
Eye contact	Severely irritating to eyes.
Skin contact	Prolonged contact may cause redness and irritation. May be absorbed through the skin in harmful amounts.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	LC50 Inhalation
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2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)	= 99 mg/kg (Rabbit)	= 450 ppm (Rat) 4 h
Naphtha (petroleum), heavy alkylate 64741-65-7	> 7000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.04 mg/L (Rat) 4 h
D-Limonene 5989-27-5	= 4400 mg/kg (Rat)	> 5 g/kg (Rabbit)	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Repeated or prolonged contact may cause allergic reactions in very susceptible persons.
Mutagenic effects No information available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol 111-76-2	A3	Group 3	-	-
D-Limonene 5989-27-5	-	Group 3	-	-

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Chronic toxicity No known effect based on information supplied.
Target Organ Effects Central nervous system.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 16.0015% of the mixture consists of ingredient(s) of unknown toxicity

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

ATEmix (oral) 4752 mg/kg
ATEmix (dermal) 8676 mg/kg
ATEmix (inhalation-gas) 19600 mg/l
ATEmix (inhalation-dust/mist) 18.8 mg/l
ATEmix (inhalation-vapor) 6300 mg/l

12. ECOLOGICAL INFORMATION

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

19.8015% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2-Butoxyethanol 111-76-2	-	1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50	1698 - 1940: 24 h Daphnia magna mg/L EC50 >1000: 48 h Daphnia magna mg/L EC50
Naphtha (petroleum), heavy alkylate 64741-65-7	30000: 72 h Pseudokirchneriella subcapitata mg/L EC50	-	2: 48 h Mysidopsis bahia mg/L LC50
D-Limonene 5989-27-5	-	35: 96 h Oncorhynchus mykiss mg/L LC50 0.619 - 0.796: 96 h Pimephales promelas mg/L LC50 flow-through	-

Persistence and degradability

No data is available on the product itself.

Bioaccumulation

Not likely to bioaccumulate.

Mobility

Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

Chemical Name	Partition coefficient
2-Butoxyethanol 111-76-2	0.81

Other adverse effects No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
D-Limonene 5989-27-5	Toxic

14. TRANSPORT INFORMATION

DOT	Regulated
UN/ID No	UN1993
Proper shipping name	Combustible liquid, n.o.s. (Terpenes)
Hazard class	3.2
Packing Group	III
Marine Pollutant	This product contains a chemical which is listed as a marine pollutant according to DOT.
Emergency Response Guide Number	128

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	-
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

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:

Chemical Name	SARA 313 - Threshold Values %
2-Butoxyethanol - 111-76-2	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product contains substances regulated by state right-to-know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Butoxyethanol 111-76-2	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards 2	Flammability 2	Instability 0	Physical and chemical hazards -
<u>HMIS</u>	Health hazard 2	Flammability 2	Physical Hazards 0	Personal protection X

Prepared By Cynamic Chemical
1472 Louis Bork Drive
Batavia, IL 60510

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Issue Note

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet