

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015). Date of Issue: 02/23/2021 Version: 1.0

# **SECTION 1: IDENTIFICATION**

- 1.1. Product Identifier
- Product Form: Mixture

Product Name: 05-5008 CyStain<sup>™</sup> BacCount Total - CyStain<sup>™</sup> Green (05-5008-P02)

## **1.2.** Intended Use of the Product

For professional use.

## 1.3. Name, Address, and Telephone of the Responsible Party

Company SYSMEX AMERICA, Inc 577 Aptakisic Road Lincolnshire, IL 60069 USA Phone: 847-996-4500 1-800-3SYSMEX (1-800-379-7639)

## 1.4. Emergency Telephone Number

Emergency Number : ChemTel LLC

(800)255-3924 (North America)

+1 (813)248-0585 (International)

# SECTION 2: HAZARDS IDENTIFICATION

# 2.1. Classification of the Substance or Mixture

**GHS-US/CA** Classification

Flam. Liq. 4 H227

Full text of hazard classes and H-statements : see section 16

# 2.2. Label Elements

GHS-US/CA Labeling	
Signal Word (GHS-US/CA)	: Warning
Hazard Statements (GHS-US/CA)	: H227 - Combustible liquid.
Precautionary Statements (GHS-US/CA)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P280 - Wear protective gloves, protective clothing, and eye protection. P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish. P403 - Store in a well-ventilated place.
	P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

## 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

# 2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

# SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1. Substance

## Not applicable

## 3.2. Mixture

Name	Synonyms	Product Identifier	% *	<b>GHS Ingredient Classification</b>
Dimethyl sulfoxide	Dimethyl sulphoxide / Durasorb / Methane, sulfinylbis- /	(CAS-No.) 67-68-5	> 99.8	Flam. Liq. 4, H227

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Methylsulfinylmethane /		
Sulfinylbis(methane) /		
Sulfoxide, dimethyl /		
Methane, 1,1'-sulfinylbis- /		
Dimethylsulphoxide /		
Dimethylsulfoxide / DMSO		

Full text of H-phrases: see section 16

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

## SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Immediately remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

# SECTION 5: FIRE-FIGHTING MEASURES

## 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>). Water may be ineffective but water should be used to keep fire-exposed container cool.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

## 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible liquid.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

**Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.

#### 5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products**: Carbon oxides (CO, CO<sub>2</sub>).

## 5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

#### 6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

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**Emergency Procedures:** Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

**Emergency Procedures:** Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Elminate ignition sources first, then ventilate the area.

## 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

## 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

#### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

# **SECTION 7: HANDLING AND STORAGE**

## 7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable. Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**Storage Conditions:** Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

## 7.3. Specific End Use(s)

For professional use.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

250 ppm

#### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing. **Hand Protection:** Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

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Skin and Body Protection: Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

# SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and C	Chemical Properties	
Physical State	: Liquid	
Appearance	: Not available	
Odor	: Not available	
Odor Threshold	: Not available	
рН	: Not available	
Evaporation Rate	: Not available	
Melting Point	: Not available	
Freezing Point	: Not available	
Boiling Point	: Not available	
Flash Point	: Not available	
Auto-ignition Temperature	: Not available	
Decomposition Temperature	: Not available	
Flammability (solid, gas)	: Not applicable	
Lower Flammable Limit	: Not available	
Upper Flammable Limit	: Not available	
Vapor Pressure	: Not available	
Relative Vapor Density at 20°C	: Not available	
Relative Density	: Not available	
Specific Gravity	: Not available	
Solubility	: Not available	
Partition Coefficient: N-Octanol/Water	: Not available	
Viscosity	: Not available	

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.

**10.2.** Chemical Stability: Combustible liquid. May form flammable or explosive vapor-air mixture.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

**10.4.** Conditions to Avoid: Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

**10.5.** Incompatible Materials: Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products: Thermal decomposition may produce: Carbon oxides (CO, CO<sub>2</sub>).

# SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

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Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

#### **11.2.** Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Dimethyl sulfoxide (67-68-5)	
LD50 Oral Rat	> 20000 mg/kg
LD50 Dermal Rat	≈ 40000 mg/kg

## **SECTION 12: ECOLOGICAL INFORMATION**

## 12.1. Toxicity

(Log Pow)

Ecology - General: Not classified.

Dimethyl sulfoxide (67-68-5)	
LC50 Fish 1	34 g/l (Exposure time: 96 h - Species: Pimephales promelas)
LC50 Fish 2	33 – 37 g/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

#### **12.2.** Persistence and Degradability

05-5008 CyStain™ BacCount Total - CyStain™ Green (05-5008-P02)		
Persistence and Degradability	Not established.	
12.3. Bioaccumulative Potential		
05-5008 CyStain™ BacCount Total - CyStain™ Green (05-5008-P02)		
Bioaccumulative Potential	Not established.	
Dimethyl sulfoxide (67-68-5)		
Partition coefficient n-octanol/water	-2.03	

12.4. Mobility in Soil Not available

#### **12.5.** Other Adverse Effects

**Other Information:** Avoid release to the environment.

#### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1.	In Accordance with DOT	
Proper	r Shipping Name : CC	MBUSTIBLE LIQUID, N.O.S.Dimethyl sulfoxide
Identif	ication Number : NA	1993
Packin	g Group : III	
14.2.	In Accordance with IMDG	Not regulated for transport
14.3.	In Accordance with IATA	Not regulated for transport
14.4.	In Accordance with TDG	Not regulated for transport

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#### SECTION 15: REGULATORY INFORMATION

#### 15.1. US Federal Regulations

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SARA Section 311/312 Hazard Classes Physical hazard - Flammable (gases, aerosols, liquids, or solids)

# Dimethyl sulfoxide (67-68-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. US State Regulations

Dimethyl sulfoxide (67-68-5) U.S. - New Jersey - Right to Know Hazardous Substance List

#### 15.3. Canadian Regulations

Dimethyl sulfoxide (67-68-5)

Listed on the Canadian DSL (Domestic Substances List)

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision	: 02/23/2021
Other Information	<ul> <li>This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.</li> </ul>

#### **GHS Full Text Phrases:**

Flam. Liq. 4	Flammable liquids Category 4
H227	Combustible liquid

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US)