

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: 05-6002 CyFlow[™] BrettCount - VIT F (Brett)

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

Met. Corr. 1	H290
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Carc. 2	H351
Repr. 1B	H360
STOT RE 2	H373

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

2.2. **Label Elements**

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA)	: Danger
Hazard Statements (GHS-US/CA)	: H290 - May be corrosive to metals.
	H315 - Causes skin irritation.
	H319 - Causes serious eye irritation.
	H351 - Suspected of causing cancer.
	H360 - May damage fertility or the unborn child.
	H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary Statements (GHS-US/CA)	: P201 - Obtain special instructions before use.
	P202 - Do not handle until all safety precautions have been read and understood.
	P234 - Keep only in original container.
	P260 - Do not breathe vapors, mist, or spray.
	P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

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P280 - Wear protective gloves, protective clothing, and eye protection. P302+P352 - IF ON SKIN: Wash with plenty of water.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see section 4 on this SDS).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P390 - Absorb spillage to prevent material-damage.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

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	% *	GHS Ingredient Classification
Formamide	Carbamaldehyde /	(CAS-No.) 75-12-7	15 - 40	Carc. 2, H351
	Methanamide / formamide			Repr. 1B, H360
				STOT RE 2, H373
Hydrochloric acid	Hydrogen chloride / Muriatic	(CAS-No.) 7647-01-0	0.1 - 1	Met. Corr. 1, H290
	acid / HYDROCHLORIC ACID / Hydrochloric acid, anhydrous			Skin Corr. 1A, H314
	/ hydrochloric acid			Eye Dam. 1, H318
	,,			STOT SE 3, H335
				Aquatic Acute 2, H401

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: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention.

Eye Contact: Immediately rinse with water for at least 15 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: Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. May damage fertility. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

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Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer. May damage fertility or the unborn child.

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: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical. Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Contact with metallic substances may release flammable hydrogen gas.

Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas.

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.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen compounds. Sulfur compounds. Chlorine compounds.

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: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

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. Ventilate 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.

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 spillage to prevent material damage.

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: May be corrosive to metals.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Do not breathe vapors, mist, spray.

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.

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Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in corrosive resistant container with a resistant inner liner. Store locked up/in a secure area.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Metals. May be corrosive to metals.

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.

USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	7 mg/m ³
USA OSHA	OSHA PEL C [ppm]	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	7 mg/m ³
USA NIOSH	NIOSH REL C [ppm]	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
Alberta	OEL Ceiling (mg/m ³)	3 mg/m ³
Alberta	OEL Ceiling (ppm)	2 ppm
British Columbia	OEL Ceiling (ppm)	2 ppm
Manitoba	OEL Ceiling (ppm)	2 ppm
New Brunswick	OEL Ceiling (mg/m ³)	7.5 mg/m ³
New Brunswick	OEL Ceiling (ppm)	5 ppm
Newfoundland & Labrador	OEL Ceiling (ppm)	2 ppm
Nova Scotia	OEL Ceiling (ppm)	2 ppm
Nunavut	OEL Ceiling (ppm)	2 ppm
Northwest Territories	OEL Ceiling (ppm)	2 ppm
Ontario	OEL Ceiling (ppm)	2 ppm
Prince Edward Island	OEL Ceiling (ppm)	2 ppm
	PLAFOND (ppm)	2 ppm
Saskatchewan	OEL Ceiling (ppm)	2 ppm
Yukon	OEL Ceiling (mg/m ³)	7 mg/m ³
Yukon	OEL Ceiling (ppm)	5 ppm
Formamide (75-12-7)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans,Skin - potential significant contribution to overall
		exposure by the cutaneous route
	NIOSH REL (TWA) (mg/m³)	15 mg/m ³
	NIOSH REL TWA [ppm]	10 ppm
	OEL TWA (mg/m³)	18 mg/m ³
	OEL TWA (ppm)	10 ppm
	OEL TWA (ppm)	10 ppm
	OEL TWA (ppm)	1 ppm
	OEL TWA (mg/m³)	18 mg/m ³
	OEL TWA (ppm)	10 ppm
	OEL TWA (ppm)	1 ppm
	OEL TWA (ppm)	1 ppm
Nunavut	OEL STEL (ppm)	15 ppm

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Nunavut	OEL TWA (ppm)	10 ppm
Northwest Territories	OEL STEL (ppm)	15 ppm
Northwest Territories	OEL TWA (ppm)	10 ppm
Ontario	OEL TWA (ppm)	10 ppm
Prince Edward Island	OEL TWA (ppm)	1 ppm
Québec	VEMP (mg/m ³)	18 mg/m ³
Québec	VEMP (ppm)	10 ppm
Saskatchewan	OEL STEL (ppm)	15 ppm
Saskatchewan	OEL TWA (ppm)	10 ppm
Yukon	OEL STEL (mg/m ³)	45 mg/m ³
Yukon	OEL STEL (ppm)	30 ppm
Yukon	OEL TWA (mg/m³)	30 mg/m ³
Yukon	OEL TWA (ppm)	20 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

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



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

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 Ph	ysical and 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

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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: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

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

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Metals. May be corrosive to metals.

10.6. Hazardous Decomposition Products: Thermal decomposition may produce: Carbon oxides (CO, CO₂). Nitrogen

compounds. Sulfur compounds. Chlorine compounds.

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: Causes skin irritation.

Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Suspected of causing cancer.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: May damage fertility or the unborn child.

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: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

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

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. Suspected of causing cancer. May damage fertility or the unborn child.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Hydrochloric acid (7647-01-0)	
LD50 Dermal Rabbit	> 5010 mg/kg
Formamide (75-12-7)	
LD50 Oral Rat	5577 mg/kg
LD50 Dermal Rabbit	6 g/kg
LC50 Inhalation Rat	> 3900 ppm (Exposure time: 6 h)
ATE US/CA (dermal)	6,000.00 mg/kg body weight
Hydrochloric acid (7647-01-0)	
IARC Group	3

Ecology - General: Not classified.

Hydrochloric acid (7647-01-0)	
LC50 Fish 1	7.45 mg/l (Species: Oncorhynchus mykiss - Exposure time: 96h)

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Formamide (75-12-7)	
LC50 Fish 1	9135 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1	> 500 mg/l (Exposure time: 48 h - Species: Daphnia magna)
12.2. Persistence and Degradabili	tv
05-6002 CyFlow™ BrettCount - VIT F (Bi	
Persistence and Degradability	Not established.
12.3. Bioaccumulative Potential	
05-6002 CyFlow™ BrettCount - VIT F (Bi	ett)
Bioaccumulative Potential	Not established.
Formamide (75-12-7)	
Partition coefficient n-octanol/water	-0.82 (at 25 °C)
(Log Pow)	0.02 (01 25 °C)
12.4. Mobility in Soil Not av	nailable
12.5. Other Adverse Effects	
Other Information: Avoid release to the	environment
SECTION 13: DISPOSAL CONSIDERA	
13.1. Waste treatment methods	
and international regulations.	ose of contents/container in accordance with local, regional, national, territorial, provincial,
Ecology - Waste Materials: Avoid release	to the environment
SECTION 14: TRANSPORT INFORM	
	were prepared in accordance with certain assumptions at the time the SDS was authored,
	bles that may or may not have been known at the time the SDS was issued.
14.1. In Accordance with DOT	
	ROCHLORIC ACIDSOLUTION
Hazard Class : 8	
Identification Number : UN1	789
Label Codes : 8	8
Packing Group : III	\checkmark
ERG Number : 157	
14.2. In Accordance with IMDG	
Proper Shipping Name : HYD	ROCHLORIC ACIDMIXTURE
Hazard Class : 8	
Identification Number : UN1	789
Label Codes : 8	8
Packing Group : III	
EmS-No. (Fire) : F-A	
EmS-No. (Spillage) : S-B	
14.3. In Accordance with IATA	
1 11 9	
Hazard Class : 8	700
Identification Number : UN1 Label Codes : 8	
Packing Group : III	
ERG Code (IATA) : 8L	
14.4. In Accordance with TDG	
Proper Shipping Name : HYD Hazard Class : 8	
Identification Number : UN1	789
Label Codes : 8	8
	▼

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Packing Group : III	
ECTION 15: REGULATORY INFORMATION	
15.1. US Federal Regulations	
05-6002 CyFlow™ BrettCount - VIT F (Brett)	
SARA Section 311/312 Hazard Classes	Physical hazard - Corrosive to metals
SANA Section S11/S12 Mazaru Classes	Health hazard - Specific target organ toxicity (single or repeated
	exposure)
	Health hazard - Skin corrosion or Irritation
	Health hazard - Serious eye damage or eye irritation
	Health hazard - Carcinogenicity
	Health hazard - Reproductive toxicity
Hydrochloric acid (7647-01-0)	
Listed on the United States TSCA (Toxic Substances Control	Act) inventory
Listed on the United States SARA Section 302	in a control y
Subject to reporting requirements of United States SARA S	ection 313
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (gas only)
SARA Section 313 - Emission Reporting	1 % (acid aerosols including mists, vapors, gas, fog, and other
	airborne forms of any particle size)
Formamide (75-12-7)	· · · ·
Listed on the United States TSCA (Toxic Substances Control	l Act) inventory
5.2. US State Regulations	, ,
•	
Hydrochloric acid (7647-01-0)	
U.S New Jersey - Right to Know Hazardous Substance List	t
U.S Pennsylvania - RTK (Right to Know) List	
U.S Massachusetts - Right To Know List	
U.S Pennsylvania - RTK (Right to Know) - Environmental H	Hazard List
Formamide (75-12-7)	
U.S New Jersey - Right to Know Hazardous Substance List	t
U.S Pennsylvania - RTK (Right to Know) List	
U.S Massachusetts - Right To Know List	
5.3. Canadian Regulations	
Hydrochloric acid (7647-01-0)	
Listed on the Canadian DSL (Domestic Substances List)	
Formamide (75-12-7)	
Listed on the Canadian DSL (Domestic Substances List)	
CTION 16: OTHER INFORMATION, INCLUDING D	ATE OF PREPARATION OR LAST REVISION
Date of Preparation or Latest: 02/23/2021	
Revision	
	as been prepared in accordance with the SDS requirements of the OSHA
	cation Standard 29 CFR 1910.1200 and Canada's Hazardous Products
Regulations (HPR)) SOR/2015-17.
GHS Full Text Phrases:	
Aquatic Acute 2 Hazardous to the	e aquatic environment - Acute Hazard Category 2
Carc. 2 Carcinogenicity (Category 2
	nage/eye irritation Category 1
Eye Dam. 1 Serious eye dam	
Eye Dam. 1Serious eye damEye Irrit. 2Serious eye dam	nage/eye irritation Category 2
Eye Dam. 1Serious eye damEye Irrit. 2Serious eye damMet. Corr. 1Corrosive to met	nage/eye irritation Category 2

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Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life

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)