

## **SDS: CHEM013 – Measurement Standard**

C Technologies, Inc. does not manufacture CHEM013. CHEM013 is manufactured exclusively for C Technologies by GFS Chemicals. Attached you will find the SDS.

# SAFETY DATA SHEET

## 1. Identification

Product Identifier	IN-SPEC® PATENT BLUE COLOR STANDARD, CUSTOM UV-VISIBLE REFERENCE MATERIAL	
Other means of identification		
Product code	8416	
Recommended use	professional, scientific and technical activities: other professional, scientific and technical activities	
Recommended restrictions	None known	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufacturer</b>		
Company Name	GFS Chemicals, Inc. P.O. Box 245 Powell, OH 43065 US	
Telephone	Phone 740-881-5501 Toll Free 800-858-9682 Fax 740-881-5989	
Website	<a href="http://www.gfschemicals.com">www.gfschemicals.com</a>	
E-mail	service@gfschemicals.com	
Emergency Phone No.	Emergency Assistance	Chemtrec 800-424-9300

## 2. Hazard(s) Identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Reproductive toxicity	Category 1
	Specific target organ toxicity, single exposure	Category 1
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard Statement	Combustible liquid. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure.
<b>Precautionary statement</b>	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces-No smoking. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF exposed or concerned: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.
Storage	Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with product characteristics at time of disposal.

**Hazard(s) not otherwise classified (HNOC)** None known

**Supplemental information** 1-3% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 1-3% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 3. Composition/Information on Ingredients

#### Mixtures

Chemical Name	Common name and synonyms	CAS #	Percent
WATER		7732-18-5	90 – 100
METHYL ALCOHOL	WOOD ALCOHOL METHANOL	67-56-1	1 - < 3
PATENT BLUE VIOLET	ACID BLUE 1 CI 42045	129-17-9	< 0.1

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First Aid Measure

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attentions if symptoms occur.
<b>Most Important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measure and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General Information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire Fighting Measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder, Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting</b>	In case of fire and/or explosion do not breathe fumes. Move containers from

<b>equipment/instructions</b>	fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Combustible liquid.

## 6. Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop leak if you can do so without risk. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. Prevent entry into waterways, sewer, basements or confined areas. Clean up in accordance with all applicable regulations.  Large Spills: Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.  Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and Storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from open flames, hot surfaces and sources of ignition. Do not breathe mist or vapor. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure Controls/Personal Protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### U.S. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	CAS #	Type	Value
METHYL ALCOHOL	67-56-1	PEL	260 mg/m <sup>3</sup> 200 ppm

#### U.S. ACGIH Threshold Limit Values

Components	CAS #	Type	Value
METHYL ALCOHOL	67-56-1	STEL	250 ppm
		TWA	200 ppm

#### U.S. NIOSH Pocket Guide to Chemical Hazards

Components	CAS #	Type	Value
METHYL ALCOHOL	67-56-1	STEL	325 mg/m <sup>3</sup> 250 ppm
		TWA	260 mg/m <sup>3</sup> 200ppm

### Biological Limit Values

#### ACGIH Biological Exposure Indices

Components	CAS #	Value	Determinant	Specimen	Sampling Time
METHYL ALCOHOL	67-56-1	15 mg/l	Methanol	Urine	*

\* For sampling details, please see the source document.

### Exposure guidelines

#### US - California OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### US - Minnesota Haz Subs: Skin designation applies

METHYL ALCOHOL (CAS 67-56-1) Skin designation applies.

#### US - Tennessee OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### US ACGIH Threshold Limit Values: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### US NIOSH Pocket Guide to Chemical Hazards: Skin designation

METHYL ALCOHOL (CAS 67-56-1)

Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection**

Wear appropriate chemical resistant gloves.

**Other**

Wear suitable protective clothing. Use of an impervious apron is recommended.

**Respiratory protection**

If ventilation is not sufficient to effectively prevent buildup of aerosols or mists, appropriate NIOSH/MSHA respiratory protection must be provided. Chemical respirator with organic vapor cartridge.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Clear
<b>Physical state</b>	Liquid
<b>Form</b>	Liquid
<b>Color</b>	Dark blue
<b>Odor</b>	Slight
<b>Odor threshold</b>	not available
<b>pH</b>	Not available.
<b>Melting point/Freezing point</b>	< 32 °F (< 0 °C) estimated
<b>Initial boiling point and boiling range</b>	212 °F (100 °C) estimated
<b>Flash point</b>	> 141.8 °F (> 61.0 °C)
<b>Evaporation rate</b>	not available
<b>Flammability</b>	not applicable
<b>Flammability limit - lower (%)</b>	not available
<b>Flammability limit - upper (%)</b>	not available
<b>Explosive limit - lower (%)</b>	not available
<b>Explosive limit - upper (%)</b>	not available
<b>Vapor pressure</b>	not available
<b>Vapor density</b>	not available
<b>Relative density</b>	not available
<b>Solubility (ies)</b>	
<b>Solubility (water)</b>	not available
<b>Partition coefficient (n-octanol water)</b>	not available
<b>Auto-ignition temperature</b>	not available

Decomposition temperature  
Viscosity

not available  
not available

#### Other Information

Density	1.00 g/cm <sup>3</sup> estimated
Explosive Properties	Not explosive
Flammability Class	Combustible IIIA estimated
Flash Point class	Combustible IIIA
Oxidizing properties	Not oxidizing.
Percent volatile	> 99 %
Specific gravity	1 estimated
VOC (weight %)	< 2.5 %

### 10. Stability & Reactivity Information

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	May include oxides of carbon

### 11. Toxicological Information

#### Information on likely routes of exposure

<b>Inhalation</b>	May cause damage to organs by inhalation. May cause damage to organs through prolonged or repeated exposure by inhalation.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

#### Information on toxicological effects

#### Acute toxicity

Components	CAS #	Species	Test Results
METHYL ALCOHOL <u>Acute</u> Oral LD50	67-56-1	Rat	5628 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.  
**Serious eye damage/eye irritation** May irritate eyes.  
**Respiratory or skin sensitization**  
**Respiratory sensitization** Not a respiratory sensitizer.  
**Skin sensitization** This product is not expected to cause skin sensitization.  
**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

PATENT BLUE VIOLET (CAS 129-17-9) 3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** May damage fertility or the unborn child.

**Specific target organ toxicity - single exposure** Causes damage to organs.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

**12. Ecological Information**

**Ecotoxicity** This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	CAS #	Species	Test Results
METHYL ALCOHOL <b>Aquatic</b> Crustacea EC50	67-56-1	Water Flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish LC50		Bluegill (Lepomis macrochirus)	13500 - 17600 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

METHYL ALCOHOL -0.77

PATENT BLUE VIOLET 0.572

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.



### 13. Disposal Considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport Information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

### 15. Regulatory Information

**US federal regulations:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated

**CERCLA/SARA Hazardous Substances**

METHYL ALCOHOL (CAS 67-56-1) Listed.

**SARA 304 Emergency release notification**

Not regulated

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not Regulated

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard – Yes  
Delayed Hazard – Yes  
Fire Hazard - Yes  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 extremely hazardous substance**

Not Listed

**SARA 311/312 - No**

**Hazardous chemical**

**SARA 313 (TRI Reporting)**

Chemical Name	CAS Number	% by wt.
METHYL ALCOHOL	67-56-1	1 - <3

**Other Federal Regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

METHYL ALCOHOL (CAS 67-56-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)**

Not regulated.

**US state regulations**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

METHYL ALCOHOL (CAS 67-56-1) Listed: March 16, 2012

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

METHYL ALCOHOL (CAS 67-56-1)

**International Inventories**

Country(s) or region	Inventory name	on inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other Information**

**Manufacturer's Issue date** 14-May-2015  
**Manufacturer's Revision Date** November 7, 2017  
**Manufacturer's Version No.** 03  
**Disclaimer**

GFS Chemicals, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision information** This document has undergone significant changes and should be reviewed in its entirety.