Product Number:	Product Name:
CSK-0125-XuL	CFDA-AM Yeast Vitality Stain Kit

Composition:

CS1-0125	CFDA-AM Yeast Vitality Stain
CS0-0113	Phosphate Buffer Solution

Section 1: Chemical Product and Company Identification

Product Number: CS1-0125
Product Name: Via Stain, CFDA-AM Yeast Vitality Stain
Supplier: Nexcelom Bioscience, LLC.
360 Merrimack St.
Lawrence, MA 01843

Section 2: Hazard Identification

a. Emergency Overview
   i. Caution--The toxicological properties of this material have not been thoroughly investigated. May be harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Handle with caution

b. HMIS Classification
   i. Health hazard: 0
   ii. Chronic Health Hazard: *
   iii. Flammability: 2
   iv. Physical hazards: 0

c. NFPA Rating
   i. Health hazard: 0
   ii. Fire: 2
   iii. Reactivity Hazard: 0

d. Potential Health Effects
   i. Inhalation May be harmful if inhaled.
   ii. Skin May cause skin irritation.
   iii. Eyes May cause eye irritation.
   iv. Ingestion May be harmful if swallowed.

e. Precautionary statement(s)
   i. P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
   ii. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
   iii. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
   i. P403 + P235 Store in a well-ventilated place. Keep cool.
   ii. P501 Dispose of contents/ container to an approved waste disposal plant.

Section 3: Composition/Information on Ingredients

CAS-No.	EC-No.	Index-No.	Concentration
5-CFDA, AM			
124412-00-6	N/A		>= 0.1 - <= 10 %
Dimethyl sulfoxide			
67-68-5	200-664-3		>= 90 - <= 99.9 %

Section 4: First Aid Measures

General Advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Avoid prolonged exposure. Wear protective clothing.
If Inhaled:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact:	Wash off with soap and plenty of water for 15 minutes. Consult a physician.
In Case of Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.
If Swallowed:	Do NOT induct vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire Fighting Measures

Flammable Properties:	Flash point – no data available Ignition temperature – no data available
Suitable Extinguishing Media:	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Special Protective Equipment for Fire-Fighters:	Wear self-contained breathing apparatus for fire-fighting if necessary.
Special hazards arising from the substance or mixture	Carbon oxides, Sulphur oxides

Section 6: Accidental Release Measures

Personal Precautions:	Avoid breathing vapours, mist or gas. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and Materials for Containment and Cleaning Up:	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions for Safe Handling:	Avoid ingestion and inhalation of vapour or mist. Do not breathe dust. Avoid contact with skin, eyes and clothing. Avoid prolonged or repeated exposure. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.
Conditions for Safe Storage:	Keep container tightly closed in a dry and well-ventilated pace. Store at -20°C. Protect from light. Hygroscopic. Store under inert gas.

Section 8: Exposure Controls and Personal Protection

Components	Cas-No.	Value	Control Parameters	Basis
Dimethyl sulfoxide	67-68-5	TWA	250 ppm	USA. Workplace Environmental Exposure Levels WEEL)

Respiratory Protection:	Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye Protection:	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin and Body Protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hand. Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace
Hygiene Measures:	Wear compatible chemical-resistant gloves to prevent skin exposure.
Engineering Controls	Use adequate ventilation to keep airborne concentrations low. Safety shower and eye bath. Wash hands before breaks and at the end of workday.

Section 9: Physical and Chemical Properties

Appearance	
Form:	Liquid
Color:	None
Safety Data	
pH:	No data available
Melting Point:	Melting point/range: 16 - 19 °C (61 - 66 °F)
Boiling Point:	189 °C (372 °F)
Flash Point:	87 °C (189 °F) - closed cup
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Auto Ignition Temperature:	No data available
Lower Explosion Limit:	Upper explosion limit: 42 %(V)
Upper Explosion Limit:	Lower explosion limit: 3.5 %(V)
Water Solubility:	completely miscible
Vapour pressure	0.55 hPa (0.41 mmHg) at 20 °C (68 °F)
Vapour density	2.70 - (Air = 1.0)
Relative vapour density	2.70 - (Air = 1.0)
Relative density	1.1 g/mL
Partition coefficient: noctanol/ Water	log Pow: -2.03

Decomposition Temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Section 10: Stability and Reactivity

Storage Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Heat, flames and sparks
Materials to Avoid:	Avoid moisture, strong bases, strong oxidizing agents, acid chlorides, phosphorus halides, strong acids, and strong reducing agents.
Hazardous Decomposition Products:	No decomposition if used according to specifications

Section 11: Toxicological Information

Acute Toxicity:	LD50 Oral – rat – 14,500 mg/kg LD50 inhalation – rat –4 h – 40250 ppm LD50 Dermal – rabbit – > 5,000mg/kg
Skin Corrosion/Irritation:	No data available
Serious Eye Damage/Irritation:	No data available
Respiratory or Skin Sensitization:	No data available
Germ Cell Mutagenicity:	Mouse lymphocyte Cytogenetic analysis Mouse lymphocyte Mutation in mammalian somatic analysis Rat Cytogenetic analysis Mouse DNA damage
Chronic Exposure:	Carcinogenicity - rat - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors. Carcinogenicity - mouse - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Leukaemia Skin and Appendages: Other: Tumors. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.
Reproductive Toxicity:	Reproductive toxicity - rat - Intraperitoneal Effects on Fertility: Abortion.

	Reproductive toxicity - rat - Intraperitoneal Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Reproductive toxicity - rat - Subcutaneous Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth). Reproductive toxicity - mouse - Oral Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system. Developmental Toxicity - mouse - Intraperitoneal Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.
Specific Target Organ Toxicity – Single Exposure:	No data available
Specific Target Organ Toxicity – Repeated Exposure:	No data available
Aspiration Hazard:	No data available
Additional Information:	RETECS: PV6210000 Effects due to ingestion may include: Nausea, Fatigue, Headache Eyes – Eye disease – Based on Human Evidence

Section 12: Ecological Information

Toxicity:	LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h EC50 - Daphnia pulex (Water flea) - 27,500 mg/l
Persistance and Degradability:	No data available
Bioaccumulative Potential	No data available
Mobility in Soil:	No data available
PBT and vPvB Assessment:	No data available
Other Adverse Affects:	Do not allow product to reach ground water or water course

Section 13: Disposable Considerations

Product:	Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated Packaging:	Dispose of as unused product.

Section 14: Transport Information

DOT (US):	NA-Number: 1993 Class: CBL Packing group: III Proper shipping name: Combustible liquid, n.o.s. (Dimethyl sulfoxide) Marine pollutant: No Poison Inhalation Hazard: No
IMDG:	Not dangerous goods
IATA:	Not dangerous goods

Section 15: Regulatory Information

SARA 302 Components:	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards:	Acute Health Hazard, Chronic Health Hazard
Massachusetts Right to Know Components:	No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right to Know Components:	Dimethyl sulfoxide CAS-No. 67-68-5 Revision Date: 2007-03-01
New Jersey Right to Know Components:	Dimethyl sulfoxide CAS-No. 67-68-5 Revision Date: 2007-03-01
California Prop. 65 Components:	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nexcelom Bioscience, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packaging slip for additional terms and conditions of sale.

Date Revised: 30 Nov 2015

END OF MSDS

Section 1: Chemical Product and Company Identification

Product Number: CS0-0113
Product Name: Phosphate Buffered Saline (PBS)
Supplier: Nexcelom Bioscience, LLC.
360 Merrimack St.
Lawrence, MA 01843

Section 2: Hazard Identification

a. Emergency Overview
   iv. OSHA Hazards
   v. Irritant, Mutagen
b. HMIS Classification
   vi. Health hazard: 1
   vii. Chronic Health Hazard: *
   viii. Flammability: 0
   ix. Physical hazards: 0
c. NFPA Rating
   x. Health hazard: 1
   xi. Fire: 0
   xii. Reactivity Hazard: 0

Section 3: Composition/Information on Ingredients

CAS-No.	EC-No.	Index-No.	Concentration
Sodium Chloride			
7647-14-5			>= 0.1 - <= 30 %
DI-Sodium Hydrogen Phosphate Anhydrous			
7558-79-4			>= 0.1 - <= 30 %
Potassium Phosphate, Monobasic			
7778-77-0			>= 0.1 - <= 30 %
Potassium Chloride			
231-211-8			>= 0.1 - <= 30 %
Water			
7732-18-5	231-791-2		>= 70 - <= 99.9 %

Section 4: First Aid Measures

General Advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If Inhaled:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact:	Wash off with soap and plenty of water. Consult a physician.
In Case of Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If Swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire Fighting Measures

Flammable Properties:	Flash point – no data available Ignition temperature – no data available
Suitable Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special Protective Equipment for Fire-Fighters:	Wear self-contained breathing apparatus for fire-fighting if necessary.

Section 6: Accidental Release Measures

Personal Precautions:	Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
Environmental Precautions:	Do not let product enter drains.
Methods and Materials for Containment and Cleaning Up:	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

Precautions for Safe Handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Conditions for Safe Storage:	Keep container tightly closed in a dry and well-ventilated pace.

Section 8: Exposure Controls and Personal Protection

Contains no substances with occupational exposure limit values.

Respiratory Protection:	Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Hand Protection:	Handle with gloves.
Eye Protection:	Safety glasses with side-shields conforming to EN166.
Skin and Body Protection:	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

Section 9: Physical and Chemical Properties

Appearance	
Form:	Liquid
Color:	Clear
Safety Data	
pH:	7.4
Melting Point:	No data available
Boiling Point:	No data available

Flash Point:	No data available
Ignition Temperature:	No data available
Lower Explosion Limit:	No data available
Upper Explosion Limit:	No data available
Water Solubility:	No data available

Section 10: Stability and Reactivity

Storage Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	No data available
Materials to Avoid:	Strong oxidizing agents, Strong acids
Hazardous Decomposition Products:	Other decomposition products - no data available

Section 11: Toxicological Information

Acute Toxicity:	No data available
Skin Corrosion/Irritation:	No data available
Serious Eye Damage/Irritation:	No data available
Respiratory or Skin Sensitization:	No data available
Germ Cell Mutagenicity:	No data available
Chronic Exposure:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive Toxicity:	No data available
Specific Target Organ Toxicity – Single Exposure:	No data available
Specific Target Organ Toxicity – repeated Exposure:	No data available
Aspriation Hazard	No data available

Section 12: Ecological Information

Toxicity:	No data available
Persistance and Degradability:	No data available
Bioaccumulative potential	No data available
Mobility in Soil:	No data available
PBT and vPvB Assessment:	No data available
Other Adverse Affects:	No data available

Section 13: Disposable Considerations

Product:	Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated Packaging:	Dispose of as unused product.

Section 14: Transport Information

DOT (US):	Not dangerous goods
IMDG:	Not dangerous goods
IATA:	Not dangerous goods

Section 15: Regulatory Information

OSHA Hazards:	Irritant
DSL Status:	All components of this product are on the Canadian DSL list.
SARA 302 Components:	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components:	SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 Hazards:	Chronic Health Hazard
Massachusetts Right to Know Components:	Disodium hydrogenorthophosphate CAS-No. 7558-79-4 Revision Date: 2007-03-01
Pennsylvania Right to Know Components:	Sodium chloride CAS-No. 7647-14-5 Disodium hydrogenorthophosphate CAS-No. 7558-79-4 Revision Date: 2007-03-01
New Jersey Right to Know Components:	Sodium chloride CAS-No. 7647-14-5 Disodium hydrogenorthophosphate CAS-No. 7558-79-4 Revision Date: 2007-03-01 Potassium chloride

	CAS-No. 7447-40-7 Potassium dihydrogenorthophosphate CAS-No. 7778-77-0
California Prop. 65 Components:	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nexcelom Bioscience, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packaging slip for additional terms and conditions of sale.

Date Revised: 30 Nov 2015

END OF MSDS