



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 30-Mar-2017

Version 2.6

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

Product Name	FCM Permeabilization buffer (1X)
Product Code	SC-3623
Pure substance/mixture	mixture
Contains Methanol	

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

For research use only. Not intended for diagnostic or therapeutic use.

### 1.3. Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc. 10410 Finnell Street Dallas, TX 75220 831.457.3800 800.457.3801 scbt@scbt.com	Santa Cruz Biotechnology, Inc. Bergheimer Str. 89-2 69115 Heidelberg, Germany +49.6221.4503 0 +1.800.457.3801 europe@scbt.com
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### 1.4. Emergency telephone number

Chemtrec  
1.800.424.9300 (Within USA)  
+1.703.527.3887 (Outside USA)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 3 - (H301)
Acute toxicity - Dermal	Category 3 - (H311)
Acute toxicity - Inhalation (Dusts/Mists)	Category 3 - (H331)
Specific target organ toxicity (single exposure)	Category 1 - (H370)
Flammable liquids	Category 2 - (H225)

### 2.2. Label Elements

Contains Methanol  
Signal word  
Symbols/Pictograms

Danger



Hazard statements

H311 - Toxic in contact with skin  
H370 - Causes damage to organs  
H301 - Toxic if swallowed  
H331 - Toxic if inhaled  
H225 - Highly flammable liquid and vapor



## Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 P330 - Rinse mouth  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P312 - Call a POISON CENTER or doctor if you feel unwell  
 P361 - Remove/Take off immediately all contaminated clothing  
 P363 - Wash contaminated clothing before reuse  
 P302 + P350 - IF ON SKIN: Gently wash with plenty of soap and water  
 P322 - Specific measures (see Emergency Phone Number on this label)  
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
 P271 - Use only outdoors or in a well-ventilated area  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P311 - Call a POISON CENTER or doctor/physician  
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
 P405 - Store locked up  
 P309 - IF exposed or if you feel unwell:  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P264 - Wash face, hands and any exposed skin thoroughly after handling  
 P270 - Do not eat, drink or smoke when using this product  
 P321 - Specific treatment (see Emergency Phone Number on this label)  
 P501 - Dispose of contents/ container to an approved waste disposal plant  
 P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 P233 - Keep container tightly closed  
 P240 - Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ ventilating/ lighting/ equipment  
 P242 - Use only non-sparking tools  
 P243 - Take precautionary measures against static discharge  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish  
 P403 + P235 - Store in a well-ventilated place. Keep cool  
 P501 - Dispose of contents/container to industrial incineration plant

**2.3. Other Hazards**

General Hazards

Not applicable



## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight No information available  
Formula No information available

### 3.2 mixtures

Chemical Name	EC No	CAS No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Methanol	Present	67-56-1	90	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370) Flam. Liq. 2 (H225)
Water	Present	7732-18-5	10	-

Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

General advice Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Skin Contact Wash off immediately with plenty of water.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water.

Self-protection of the first aider Remove all sources of ignition.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### 5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available

Hazardous combustion products Carbon oxides.

### 5.3. Advice for firefighters

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

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures



Personal precautions Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

For emergency responders Use personal protection recommended in Section 8.

## 6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

## 6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

## 6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

General Hygiene Considerations When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers.

### 7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Methanol 67-56-1	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> Skin	STEL: 250 ppm STEL: 333 mg/m <sup>3</sup> TWA: 200 ppm TWA: 266 mg/m <sup>3</sup> Skin	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 1000 ppm STEL: 1300 mg/m <sup>3</sup>	S* TWA: 200 ppm TWA: 266 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 270 mg/m <sup>3</sup> Ceiling / Peak: 800 ppm Ceiling / Peak: 1080 mg/m <sup>3</sup> Skin
Component	Italy	Portugal	Netherlands	Finland	Denmark
Methanol 67-56-1 ( 90 )	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> Skin	STEL: 250 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	Skin TWA: 133 mg/m <sup>3</sup> TWA: 100 ppm	TWA: 200 ppm TWA: 270 mg/m <sup>3</sup> STEL: 250 ppm STEL: 330 mg/m <sup>3</sup> Skin	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> Skin
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Methanol 67-56-1	Skin STEL 800 ppm STEL 1040 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	Skin STEL: 800 ppm STEL: 1040 mg/m <sup>3</sup> TWA: 200 ppm TWA: 260 mg/m <sup>3</sup>	STEL: 300 mg/m <sup>3</sup> TWA: 100 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 130 mg/m <sup>3</sup> Skin STEL: 100 ppm STEL: 130 mg/m <sup>3</sup>	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 600 ppm STEL: 780 mg/m <sup>3</sup> Skin

Derived No Effect Level (DNEL) No information available



Predicted No Effect Concentration (PNEC) No information available.

## 8.2. Exposure controls

Engineering Controls	Showers Eyewash stations Ventilation systems
Eye/face protection	Tight sealing safety goggles.
Skin and Body Protection	Gloves made of plastic or rubber. Antistatic footwear. Wear fire/flammable resistant/retardant clothing.
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.
Environmental exposure controls	No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	liquid
Appearance	No information available
Odor	Odorless

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	No information available
Boiling point	64 °C
Flash point	11 °C
Density	No information available
Evaporation rate	No information available
Upper flammability limits	44.0%
Lower flammability limit	5.5%
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity Not applicable

### 10.2. Chemical stability

Stability	Stable under recommended storage conditions.
Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization	No information available.
Possibility of Hazardous Reactions	None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks.



### 10.5. Incompatible materials

Incompatible materials Strong oxidizing agents.

### 10.6. Hazardous decomposition products

Hazardous Decomposition Products Carbon oxides.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.  
Unknown acute toxicity 0% 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) 111.00 mg/kg  
ATEmix (dermal) 333.00 mg/kg  
ATEmix (inhalation-dust/mist) 0.56 mg/l

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol	= 6200 mg/kg ( Rat )	= 15800 mg/kg ( Rabbit )	= 22500 ppm ( Rat ) 8 h = 64000 ppm ( Rat ) 4 h
Water	> 90 mL/kg ( Rat )		

Target Organ Effects Gastrointestinal tract (GI), Central nervous system, Eyes, Respiratory system, Skin.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecotoxicity May cause long lasting harmful effects to aquatic life.  
Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methanol		28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	

### 12.2. Persistence and degradability

Persistence and degradability No information available.

### 12.3. Bioaccumulative potential

Bioaccumulation No information available.

Chemical Name	Partition coefficient
Methanol	-0.77

### 12.4. Mobility in soil

Mobility No information available.

### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

**12.6. Other adverse effects**

Other adverse effects No information available

**Section 13: DISPOSAL CONSIDERATIONS****13.1. Waste treatment methods**

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Other Information Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORT INFORMATION**

	<u>RID / ADR</u>	<u>IMDG</u>	<u>ICAO (air) / IATA</u>
<b>14.1 UN/ID no</b>	UN1230	UN1230	UN1230
<b>14.2 Proper shipping name</b>	Methanol	Methanol	Methanol
<b>14.3 Hazard Class</b>	3	3	3
<b>Subsidiary hazard class / Labels</b>	-	6.1	6.1
<b>14.4 Packing Group</b>	II	II	II
<b>14.5 Environmental Hazard</b>	-	-	-
<b>14.6 Special Provisions</b>	-	279	A104, A113
	Classification code FT1 Tunnel restriction code (D/E)	EmS-No F-E, S-D	

**Section 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National Regulations**

Chemical Name	French RG number	Title
Methanol 67-56-1	RG 84	

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**International Inventories****All of the components in the product are on the following Inventory lists**

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC) Philippines (PICCS)

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Methanol	X	X	-	X	-	X	X	X	X	X
Water	X	X	-	X	-	-	X	X	X	X

X - Listed

TSCA - 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 Chemical Substances/European 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

## 15.2. Chemical safety assessment

Chemical Safety Report No information available

## Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H301 - Toxic if swallowed  
H311 - Toxic in contact with skin  
H331 - Toxic if inhaled  
H370 - Causes damage to organs if inhaled  
H225 - Highly flammable liquid and vapor  
No information available.

Revision note

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

### Disclaimer

The information provided in this Material 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**