



RAW 264.7 Whole Cell Lysate: sc-2211

MATERIAL SAFETY DATA SHEET

The Power to Question

SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name: RAW 264.7 Whole Cell Lysate
 Catalog Number: sc-2211
 Supplier: Santa Cruz Biotechnology, Inc.
 2145 Delaware Ave.
 Santa Cruz, California 95060
 800.457.3801 or 831.457.3800
 Emergency: ChemWatch
 Within the US & Canada: 877-715-9305
 Outside the US & Canada: +800 2436 2255
 (1-800-CHEMCALL) or call +613 9573 3112

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

<u>Substance Name</u>	<u>CAS #</u>	<u>EC #</u>	<u>Annex I #</u>
European collection of cell cultures, human / non-primate	None	None	Nonenon-

The hazards identified with this product are the following component(s):

<u>Ingredient Name</u>	<u>CAS #</u>	<u>EC #</u>	<u>SARA 313</u>
Dimethyl sulfoxide	67-68-5	200-664-3	None

SECTION 3 - HAZARDS IDENTIFICATION

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT

Not hazardous according to Directive 67/548/EEC.

4 - FIRST AID MEASURES

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Combustible liquid. Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

ENVIRONMENTAL PRECAUTION(S)

Avoid contaminating sewers and waterways with this material.

METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

7 - HANDLING AND STORAGE

HANDLING

Directions for Safe Handling: Do not breathe vapor. Avoid contact with DMSO solutions containing toxic materials or materials with unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed. Store at -20° C.

8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

EXPOSURE LIMITS - GERMANY

Source Type Value

TRGS 900 OEL 160 mg/m³

Remarks: H,CH

EXPOSURE LIMITS - SWEDEN

Source Type Value

LLV (Level150 mg/m³

50 ppm

Remarks: H

EXPOSURE LIMITS - SWITZERLAND

Source Type Value

OEL OEL 160 mg/m³

50 ppm

Remarks: H

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

Skin Protection: Chemical resistant apron.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance Liquid
 pH N/A
 BP/BP Range N/A
 MP/MP Range N/A
 Flash Point N/A
 Flammability N/A

continued...

Autoignition Temp	.N/A
Oxidizing Properties	.N/A
Explosive Properties	.N/A
Explosion Limits	.N/A
Vapor Pressure	.N/A
Partition Coefficient	.N/A
Viscosity	.N/A
Vapor Density	.N/A
Saturated Vapor Conc.	.N/A
Evaporation Rate	.N/A
Bulk Density	.N/A
Decomposition Temp.	.N/A
Solvent Content	.N/A
Water Content	.N/A
Surface Tension	.N/A
Conductivity	.N/A
Miscellaneous Data	.N/A
Solubility	.N/A

N/A = not available

10 - STABILITY AND REACTIVITY

STABILITY

Stable: Stable.

Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Nature of decomposition products not known.

HAZARDOUS EXOTHERMIC REACTIONS

Hazardous Exothermic Reactions: Methyl sulfoxide (DMSO) undergoes a violent exothermic reaction on mixing with copper wool and trichloroacetic acid. On mixing with potassium permanganate it will flash instantaneously. It reacts violently with: acid halides, cyanuric chloride, silicon tetrachloride, phosphorus trichloride and trioxide, thionyl chloride, magnesium perchlorate, silver fluoride, methyl bromide, iodine pentafluoride, nitrogen periodate, diborane, sodium hydride, and perchloric and periodic acids. When heated above its boiling point methyl sulfoxide degrades giving off formaldehyde, methyl mercaptan, and sulfur dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - TOXICOLOGICAL INFORMATION

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Readily absorbed through skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be

irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

TARGET ORGAN INFORMATION

Eyes. Skin.

12 - ECOLOGICAL INFORMATION

Not Available

13 - DISPOSAL CONSIDERATIONS

SUBSTANCE DISPOSAL

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. Observe all federal, state, and local environmental regulations.

14 - TRANSPORT INFORMATION

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - REGULATORY INFORMATION

Not hazardous according to Directive 67/548/EEC.

Caution: Substance not yet fully tested (EU).

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

Self-Classification

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

12/5/2011