Countable Labs.

SAFETY DATA SHEET

Countable Fluid

SECTION 1: Identification

GHS Product identifier

Product name : Countable Fluid Kit
Product number : KT0007
Kit Component : Countable Fluid (PR0014)

Recommended use of the chemical and restrictions on use

Identified Use : For use in the Countable PCR Instrument (PH0001) for sample imaging

Supplier's details

Company Name : Countable Labs, Inc.
1810 Embarcadero Road, Suite 200
Palo Alto CA 94303
United States
Telephone : +1 (650) 665-7953
Website : www.countablelabs.com

For research use only. Not for use in diagnostic procedures

SECTION 2: Hazard identification

Hazard Classification (GHS classification in accordance with: (US) OSHA (29 CFR 1910.1200)
Not a hazardous substance or mixture.

Signal Word

Warning

Hazard Pictograms

None.

Health Hazards

Not Hazardous.

Physical Hazards
Flammable Liquids, Category 4

Environmental Hazards
Not Hazardous

Hazard Statements
H227 — Combustible liquid

Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280	Wear protective gloves/eye protection/face protection
P370+P378	In case of fire: Use water spray, foam, carbon dioxide, dry chemical to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to licensed waste disposal facility.

SECTION 3: Composition/information on ingredients

Mixtures

Components

1. Dimethyl sulfoxide

Concentration: <= 100 % (weight)*
EC no.: 200-664-3
CAS no.: 67-68-5

Trade secret statement (OSHA 1910.1200(i))

*The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

Description of necessary first-aid measures

Skin Contact: Rinse skin with water. Immediate medical attention is not required.

Eye Contact:	Rince cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation:	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Notes to Physician:	Treat symptomatically.

Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of immediate medical attention and special treatment needed, if necessary
None.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water spray. Carbon dioxide (CO2). Alcohol-resistant foam. Dry chemical.

Unsuitable extinguishing media
No information available.

Specific hazards arising from the substance or chemical
None

Protective equipment and precautions for firefighters
Standard procedure for chemical fires.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection if necessary. Avoid breathing gas, mist, vapors, spray. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep away from heat and sources of ignition.
For personal protection see section 8.

Environmental precautions
Should not be released into the environment. Do not let product enter drains.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Reference to other sections
See section 13 for more information.

SECTION 7: Handling and storage

Precautions for safe handling
Use personal protective equipment as required. No special handling advice are necessary.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)
For research use only.

SECTION 8: Exposure controls/personal protection

Control parameters
Dimethyl sulfoxide
CAS: 67-68-5 (EC: 200-664-3)
ACGIH: 250 ppm WEEL inhalation

Engineering measures
Ensure adequate ventilation, especially confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment (PPE)

Eye/face protection:	Wear sealing safety glasses.
Hand protection:	Wear suitable gloves. Gloves material - compatible chemical-resistant gloves.
Skin and body protection:	Wear suitable protective clothing.

Respiratory protection:	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
Respiratory protection:	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
Hygiene Measure:	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls:	Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Clear liquid
Odor:	Slight sulfur or onion and garlic like smell
Odor threshold:	No data
pH:	No data
Melting point/freezing point:	18.5 °C (65.3 °F) - based on pure DMSO
Boiling point/boiling range:	189 °C (372.2 °F) - based on pure DMSO
Flash point:	> 95 °C (188.6 °F) - Closed Cup
Auto-ignition temperature:	No data
Decomposition temperature:	No data
Evaporation rate:	No data
Flammability (solid, gas):	No data
Upper flammable or explosive limits:	No data
Lower flammable or explosive limits:	No data
Vapor pressure:	No data
Vapor density:	No data
Relative density:	No data
Specific density:	No data
Solubility:	No data
Partition coefficient; n-octanol/water:	No data
Viscosity:	No data
Explosive properties:	No data

Oxidizing properties:	No data
Other information:	No data

SECTION 10: Stability and reactivity

Reactivity
None known, based on information available.

Chemical stability
Stable under normal conditions.

Possibility of hazardous reactions
Hazardous reaction has not been reported.

Conditions to avoid
No information available.

Incompatible materials
Strong acids, Strong oxidizing agents, Strong bases, Alkali metals

Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Likely Routes of Exposure: Eye contact. Skin contact.

Components:
Dimethyl sulfoxide
LD50 Skin - Rat - > 5,000 mg/kg
LD50 Oral - Rat - 14,500 mg/kg
LC50 Inhalation - Rat - 40250 ppm

Symptoms (including delayed and immediate effects):

Inhalation:	May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
Ingestion:	May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin corrosion/irritation

Based on Dimethyl sulfoxide

OECD Test Guideline 404 Skin - Rabbit - 4 h irritation — Result: Slight

Serious eye damage/irritation

Based on Dimethyl sulfoxide

OECD Test Guideline 405 Eyes - Rabbit - 24 h irritation — Result: Slight

Respiratory or skin sensitization

Based on Dimethyl sulfoxide

OECD Test Guideline 406 Eyes - Guinea pig — Result: Negative

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471 — Result: negative

Test Type: sister chromatid exchange assay
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 479 Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473 Result: negative

Test Type: Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Species: Rat
Application Route: Intraperitoneal
Method: OECD Test Guideline 474 Result: negative

Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential 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.

Summary of evaluation of the CMR properties
No data available.

Specific target organ toxicity (STOT) - single exposure
No data available.

Specific target organ toxicity (STOT) - repeated exposure
No data available.

Aspiration hazard
No data available.

SECTION 12: Ecological information

Toxicity
Dimethyl sulfoxide
LC50 - Pimephales promelas (fathead minnow) - 34,000 mg/l - 96 h
LC50 - Oncorhynchus mykiss (rainbow trout) - 35,000 mg/l - 96 h
EC50 - Daphnia magna (water flea) - 24,600 mg/l - 48 h
EC50 - Pseudokirchneriella subcapitata (green algae) - 17,600 mg/l - 72 h

Persistence and degradability
Dimethyl sulfoxide
Result: 31 % - According to the results of tests of biodegradability this product is not readily biodegradable.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Endocrine disrupting properties
No data available

Other adverse effects
No data available.

SECTION 13: Disposal considerations

Waste Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT (US) / IMDG

Not classified as dangerous in the meaning of transport regulations

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question.

US EPA TSCA public inventory

Chemical name: Dimethyl sulfoxide

CAS number: 67-68-5

U.S. Federal Regulations

SARA 302 Components	Not applicable
SARA 313 Components	Not applicable
SARA 311/312 Hazards	Not applicable
Clean Air Act	Not Applicable

U.S. Federal Regulations

California Prop. 65 Components	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Further information/disclaimer

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED,INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.