



Cell Signaling

TECHNOLOGY®

SAFETY DATA SHEET (SDS): According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2014-01-31

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Version: 1

SECTION 1. Identification

Product identifier

Product No.	12369
Product name	Nitrocellulose Sandwiches
UN number	UN3270
Description	Nitrocellulose Sandwiches from Cell Signaling Technology® are pre-packaged sandwiches consisting of a pre-cut nitrocellulose membrane and 2 sheets of 0.34 mm thick blotting paper for protein detection during western blotting.
Other means of identification	12369M, 12369P, 12369P2, 12369S

Recommended use of the chemical and restrictions on use

Identified uses	This product is intended for research purposes only.
Uses advised against	This product is not intended for use in diagnostic procedures or therapeutics. This product is not intended for use in humans or animals.

Manufacturer, importer, supplier

Manufacturer address	Cell Signaling Technology, Inc. 3 Trask Lane Danvers, MA 01923 TEL: +1 978 867 2300 FAX: +1 978 867 2400
Website	www.cellsignal.com
Email address	support@cellsignal.com
Company phone number	978-867-2300
Emergency telephone number	In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids	Category 1
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GHS Label elements, including precautionary statements



Signal Word

Danger

Hazard statement(s)

Flammable solid.

Precautionary Statement(s)

Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/Bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection.

Supplementary Hazard Information

Hazards not otherwise classified (HNOC) None

SECTION 3. Composition/information on ingredients

Chemical nature Mixture of nitric esters of cellulose.
Common name Cellulose nitrate (nitrocellulose) containing a maximum of 12.6% nitrogen
Synonyms cellulose nitrate, nitrocellulose, nitrocellulose membrane filter.

Chemical Name	CAS No.	Weight %
nitrocellulose, containing a maximum of 12,6 % nitrogen	9004-70-0	100

SECTION 4. First-aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact Wash skin with soap and water.
Inhalation Move to fresh air.
Ingestion Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed

No information or data specific to the product on this toxicological (health) effect is available.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

Advice for emergency responders

General advice For further assistance, contact your local Poison Control Center.
Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable Extinguishing Media None.

Specific hazards arising from the chemical

Extremely flammable. Will be easily ignited by heat, sparks or flames.

Explosion Data

Sensitivity to Mechanical Impact Not impact sensitive.
Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

In the event of fire and/or explosion do not breathe fumes. Use self-contained pressure-demand breathing apparatus if needed to prevent exposure to smoke or airborne toxins.

SECTION 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). During unexpected circumstances and elevated temperatures such as a fire, evacuate personnel to safe areas and use personal protective equipment to prevent exposure to volatiles.

Other information Keep substance wet using water spray.

For emergency responders Use personal protective equipment as required.

Environmental precautions

Should not be released into the environment. See Section 12 for additional information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment. Flush area with flooding quantities of water. Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly.

SECTION 7. Handling and storage**Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges. Remove all sources of ignition. Use according to package label instructions.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. For safety reasons in case of fire, cans should be stored separately in closed containments.

Packaging material No information available.

Incompatible products Strong oxidizing agents, strong acids, and strong bases.

SECTION 8. Exposure controls/personal protection**Control parameters**

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

Appropriate engineering controls

Process enclosure and/or ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Safety glasses with side-shields.
Skin and body protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection	None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	7 X 8.5 cm membrane
Odor	Odorless
Color	White to off-white
Odor Threshold	No information available
pH	No information available
Melting point/freezing point	No information available
Initial boiling point and boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility	No information available
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	>160 °C
Decomposition temperature	No information available
Explosive properties	No information available
Oxidizing properties	No information available
VOC content	No information available
Viscosity	No information available
Density	No information available

SECTION 10. Stability and reactivity

Reactivity

Reacts with incompatible materials causing a fire and explosion hazard.

Chemical stability

Stable under recommended storage conditions. Decomposes violently under high temperature.

Possibility of hazardous reactions

Hazardous reactions	Exothermic reaction possible with strong oxidizers.
Hazardous polymerization	None under normal processing.

Conditions to Avoid

Heat, flames and sparks. Exposure to UV-rays. Storage near to reactive materials.

Incompatible Materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions: Nitrogen oxides (NO_x), Carbon oxides, Aldehydes.

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation	There is no data available for this product.
Eye contact	There is no data available for this product.
Skin contact	There is no data available for this product.
Ingestion	There is no data available for this product.

Information on toxicological effects

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
nitrocellulose, containing a maximum of 12,6 % nitrogen 9004-70-0	> 5 g/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms	No information available.
Corrosivity	No information available.
Sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	No information available.
Developmental Toxicity	No information available.
Teratogenicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Neurological effects	No information available.
Aspiration Hazard	No information available.
Endocrine Disruptor Information	No information available.

SECTION 12. Ecological information

Ecotoxicity

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available

Other adverse effects

No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods

Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14. Transport information

DOT

UN number	UN3270
Transport hazard class(es)	4.1
Packing Group	II
Description	UN3270, Nitrocellulose membrane filters , 4.1, II
Emergency Response Guide Number	133

IATA

UN number	UN3270
Transport hazard class(es)	4.1
Packing Group	II
ERG Code	3L
Description	UN3270, Nitrocellulose membrane filters , 4.1, II

IMDG/IMO

UN number	UN3270
Transport hazard class(es)	4.1
Packing group	II
EmS No.	F-A, S-I
Description	UN3270, Nitrocellulose membrane filters , 4.1, II

SECTION 15. Regulatory information

All of the components in the product are on the following Inventory lists:

TSCA	Complies
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DSL	Complies
NDSL	Complies

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
nitrocellulose, containing a maximum of 12,6 % nitrogen 9004-70-0	Listed	Listed	Listed

U.S. EPA Label Information

This product does not contain any substances regulated as pesticides.

SECTION 16. Other information

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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 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