

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
 SafeWork Australia Approved Code of Practice about the preparation of safety data sheets for
 hazardous chemicals (July 2018), which is an approved code of practice under section 274 of the Work
 Health and Safety Act

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Revision Number 1

Section 1: Identification

Product identifier

Product Name Rubber Solution Glue (PCA 005)

Other means of identification

Proper shipping name ADHESIVES SOLUTION

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Adhesives

Uses advised against None known

Details of manufacturer or importer

Importer

Sysmex Australia Pty Ltd
 Suite 3, Level 5
 15 Talavera Rd
 Macquarie Park
 NSW 2113
 Telephone no. +61 2 9016 3040

Manufacturer

CytoCell Ltd., Oxford Gene Technology
 418 Cambridge Science Park, Milton Road,
 Cambridge
 CB4 0PZ, United Kingdom
 T: +44 (0)1223 294048
 F: +44 (0)1223 294986
 probes@cytoCell.com

For further information, please contact

Contact Point Product Safety Department

Emergency telephone number

Emergency telephone number For medical advice (English): 13 11 26 (Poisons Information Centre)

Section 2: Hazard(s) identification

GHS Classification

Flammable liquids	Category 2
Aspiration hazard	Category 1
Skin corrosion/irritation	Category 2

Specific target organ toxicity — single exposure

Category 3

Label elements

Flame
Exclamation mark
Health hazard

**Signal word**

Danger

Hazard statements

Highly flammable liquid and vapour
Causes skin irritation
May cause drowsiness or dizziness
May be fatal if swallowed and enters airways

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapours/spray
Use only outdoors or in a well-ventilated area
Ground and bond container and receiving equipment
Use non-sparking tools
Take action to prevent static discharges
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of water and soap
If skin irritation occurs: Get medical advice/attention
Take off all contaminated clothing and wash it before reuse
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Call a POISON CENTRE or doctor if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification

May be harmful in contact with skin.
May be harmful if inhaled.

Section 3: Composition/information on ingredients

Chemical name	CAS No	Weight-%
n-Heptane	142-82-5	60-90

Ethanol	64-17-5	10-40
Non-hazardous ingredients	Proprietary	Balance

Section 4: First aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Emergency telephone number	Poisons Information Centre, Australia: 13 11 26
Inhalation	Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
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Indication of any immediate medical attention and special treatment needed

Note to doctors	Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances.
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Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Highly flammable liquid and vapour. Vapours are heavier than air and may spread along floors.
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Hazardous combustion products Carbon oxides.

Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Hazchem code •3YE

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapours or mists. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not

be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labelled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store away from other materials.

Incompatible materials

Strong oxidising agents.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits

Chemical name	Australia	New Zealand	ACGIH TLV
n-Heptane 142-82-5	TWA: 400 ppm TWA: 1640 mg/m ³ STEL: 500 ppm STEL: 2050 mg/m ³	TWA: 400 ppm TWA: 1640 mg/m ³ STEL: 500 ppm STEL: 2050 mg/m ³	STEL: 500 ppm TWA: 400 ppm
Ethanol 64-17-5	TWA: 1000 ppm TWA: 1880 mg/m ³	TWA: 1000 ppm TWA: 1880 mg/m ³	STEL: 1000 ppm

Chemical name	European Union	United Kingdom	Germany MAK
n-Heptane 142-82-5	TWA: 500 ppm TWA: 2085 mg/m ³	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 1500 ppm STEL: 6255 mg/m ³	TWA: 500 ppm TWA: 2100 mg/m ³ Peak: 500 ppm Peak: 2100 mg/m ³
Ethanol 64-17-5	-	TWA: 1000 ppm TWA: 1920 mg/m ³ STEL: 3000 ppm STEL: 5760 mg/m ³	TWA: 200 ppm TWA: 380 mg/m ³ Peak: 800 ppm Peak: 1520 mg/m ³

Biological occupational exposure limits

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

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Hand protection

Wear suitable gloves. Impervious gloves.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Avoid release to the environment.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Colour	Yellowish
Odour	Petroleum
Odour threshold	No information available

Values

pH

Melting point / freezing point

Initial boiling point and boiling range

Flash point

-4 °C

Evaporation rate

Flammability

Flammability Limit in Air

Upper flammability or explosive limits 6.7 %

Lower flammability or explosive limits 1.1 %

Vapour pressure

98760 mmHg

Vapour density

No data available

Relative density

0.722

Water solubility

Immiscible in water

Solubility(ies)

No data available

Partition coefficient

No data available

Autoignition temperature

No data available

Decomposition temperature

No data available

Kinematic viscosity

No data available

Dynamic viscosity

400 - 600 cP

Explosive properties

No information available.

Oxidising properties

No information available.

@ 20 °C

Other information

Softening point No information available

Molecular weight No information available

VOC Content (%) 660 g/L 660

Liquid Density No information available

Bulk density No information available

Particle characteristics No information available

Section 10: Stability and reactivity

Reactivity

Reactivity None under normal use conditions.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition. Protect from direct sunlight.

Incompatible materials

Incompatible materials Strong oxidising agents.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides.

Section 11: Toxicological information**Acute toxicity****Information on likely routes of exposure****Product Information**

Inhalation Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness. May be harmful if inhaled.

Eye contact May cause irritation.

Skin contact Repeated exposure may cause skin dryness or cracking. Causes skin irritation. (based on components).

Ingestion Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Numerical measures of toxicity - Product Information**Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	70,600.00 mg/kg
ATEmix (dermal)	3,333.30 mg/kg
ATEmix (inhalation-dust/mist)	76.30 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
n-Heptane	-	= 3000 mg/kg (Rabbit)	> 73.5 mg/L (Rat) 4 h
Ethanol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h = 133.8 mg/L (Rat) 4 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Chemical name	Australia	European Union	IARC
Ethanol - 64-17-5	-	-	Group 1

Reproductive toxicity No information available.

STOT - single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

STOT - repeated exposure No information available.

Aspiration hazard May be fatal if swallowed and enters airways.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
n-Heptane	-	LC50: =375.0mg/L (96h, Cichlid fish)	-	-
Ethanol	-	LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: 13400 - 15100mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas)	-	LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna)

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability Slowly biodegradable.

Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Component Information

Chemical name	Partition coefficient
n-Heptane	4.66
Ethanol	-0.32

Mobility

Mobility Immiscible in water. Given its physical and chemical characteristics, the product generally shows low soil mobility.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

See section 8 for more information

Section 14: Transport information

ADG

UN number UN1133
Proper shipping name ADHESIVES SOLUTION
Transport hazard class(es) 3
Packing group II
Special Provisions *
Description UN1133, ADHESIVES SOLUTION, 3, II
Limited quantity (LQ) 5 L
Hazchem code •3YE

IATA

UN number or ID number UN1133
UN proper shipping name Adhesives solution
Transport hazard class(es) 3
Packing group II
ERG Code 3L
Special Provisions A3
Description UN1133, Adhesives solution, 3, II

IMDG

UN number or ID number UN1133
UN proper shipping name ADHESIVES SOLUTION
Transport hazard class(es) 3
Packing group II
EmS-No F-E, S-D
Marine pollutant P
Description UN1133, ADHESIVES SOLUTION (n-Heptane), 3, II, (-4°C C.C.), Marine pollutant

Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

No poisons schedule number allocated

Australian Industrial Chemicals Introduction Scheme (AICIS)

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
n-Heptane - 142-82-5	Contact supplier for inventory compliance status	-
Ethanol - 64-17-5	Contact supplier for inventory compliance status	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Major hazard (accident/incident planning) regulation

Verify that licence requirements are met

Hazardous chemical

Liquids with flash points <61°C kept above their boiling points at ambient conditions

Threshold quantity (T)
200

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
n-Heptane - 142-82-5	20 MWh Threshold category 2b total 60000 MWh Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total
Ethanol - 64-17-5	10 tonne/yr Threshold category 1

International Inventories

AICS

Contact supplier for inventory compliance status.

NZIoC

Contact supplier for inventory compliance status.

TSCA

Contact supplier for inventory compliance status.

DSL/NDSL

Contact supplier for inventory compliance status.

EINECS/ELINCS

Contact supplier for inventory compliance status.

ENCS

Contact supplier for inventory compliance status.

IECSC

Contact supplier for inventory compliance status.

KECL Contact supplier for inventory compliance status.
PICCS Contact supplier for inventory compliance status.

Legend:

AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Any other relevant information

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Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 Australian Industrial Chemicals Introduction Scheme (AICIS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
 Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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