

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
 Hazardous Substances (Safety Data Sheets) Notice 2017. This notice is issued by the Environmental Protection Authority
 under sections 75 and 76(1)(b), (f), (g) and (h) of the Hazardous Substances and New Organisms Act 1996

Issuing Date: 14-Oct-2022

Revision Date: 14-Oct-2022

Revision Number: 1

Section 1: Identification

Product identifier

Product Name Rubber Solution Glue (PCA 005)

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Adhesives

Uses advised against None known

Details of the supplier of the safety data sheet

Importer

Sysmex New Zealand Limited
 Level 3, 103 Carlton Gore Rd
 New Market
 Auckland 1023, New Zealand
 +64-9-630-3554/ 0800797639

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

E-mail address regulatory@sysmex.co.nz

Emergency telephone number

Emergency telephone For Sysmex Supply Chain support or Product Related Enquiries: +64 9 6303554 / 0800797639 (Mon to Fri – 8.30 am to 5.00 pm)
 For any spillage or clean up issues: CHEMCALL 0800 243 622 (24 hours – 365 days)
 National Poison Centre 0800 764 766 (0800 POISON)

Section 2: Hazard identification

GHS Classification

Flammable liquids	Category 2
Aspiration hazard	Category 1
Skin corrosion/irritation	Category 2
Specific target organ toxicity — single exposure	Category 3
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label elements**Signal word**

Danger

Hazard statements

Highly flammable liquid and vapour
 Causes skin irritation
 May cause drowsiness or dizziness
 Very toxic to aquatic life with long lasting effects
 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
 Avoid release to the environment
 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 skin irritation occurs: Get medical advice/attention
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
 Wash contaminated clothing before reuse
 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
 Collect spillage

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

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
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: Fire-fighting 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. Highly flammable liquid and vapour. Keep product and empty container away from heat and sources of ignition. Vapours are heavier than air and may spread along floors. Pay attention to flashback. 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.
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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.

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/personal protection

Control parameters

Exposure Limits

Chemical name	New Zealand	ACGIH TLV	United Kingdom	Australia
n-Heptane 142-82-5	TWA: 400 ppm TWA: 1640 mg/m ³ STEL: 500 ppm STEL: 2050 mg/m ³	STEL: 500 ppm TWA: 400 ppm	TWA: 500 ppm TWA: 2085 mg/m ³ STEL: 1500 ppm STEL: 6255 mg/m ³	TWA: 400 ppm TWA: 1640 mg/m ³ STEL: 500 ppm STEL: 2050 mg/m ³
Ethanol 64-17-5	TWA: 1000 ppm TWA: 1880 mg/m ³	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1920 mg/m ³ STEL: 3000 ppm STEL: 5760 mg/m ³	TWA: 1000 ppm TWA: 1880 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.

Hand protection

Wear suitable gloves. Impervious gloves.

Skin and body protection

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

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.

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	
<u>Values</u>		<u>Remarks • Method</u>
pH		No data available
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flash point	-4 °C	
Evaporation rate		No data available
Flammability		No data available
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	@ 20 °C
Explosive properties	No information available.	
Oxidising properties	No information available.	
<u>Other information</u>		
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		

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.

Acute toxicity**Numerical measures of toxicity**

No information available.

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

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	New Zealand	IARC
Ethanol - 64-17-5		Group 1

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

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.

Data used to identify the health effects Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

Section 12: Ecological information

Ecotoxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Aquatic ecotoxicity

Chemical name	Algae/aquatic plants	Fish	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

Chemical name	Earthworm	Avian	Honeybees
Ethanol	Acute Toxicity: LC50 0.1 - 1 mg/cm2 (Eisenia foetida, 48 h filter paper)	-	-

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 in soil

Mobility in soil No information available.

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

Other adverse effects

No information available.

Section 13: Disposal considerations

Waste treatment methods**Waste from residues/unused products**

Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste. Flammable substances - may not be disposed of into or onto a landfill or sewage facility.

They may only be burnt in certain situations.

Flammable gases, liquids and solids may only be discharged into the environment or landfill as waste if the substance will not at any time come into contact with any explosives, oxidising gases, liquids or solids or organic peroxides; and there will be no ignition source in the vicinity of the disposal site at any time and if the substance were to ignite, no person, or place where a person may legally be, would be exposed to an unsafe level of heat radiation. Substances which are hazardous to human health or corrosive to metals – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is no tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances. Environmentally hazardous substances – if the substance, or if it contains a component that is hazardous to the aquatic environment or bioaccumulative and not rapidly degradable, then any component that is bioaccumulative and not rapidly degradable must be removed. The product may only be discharged into the environment if an environmental exposure limit has been set for the substance (or a component of the substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the environmental exposure limit.

Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from. Packages may only be reused or recycled if the package has been treated to remove any residual contents of the hazardous substance (class 1, 2, 3, 4, or 5); or the contents of the residue in the package are below the threshold for the substance to be classified as hazardous (class 6, 8, or 9 substance).

Section 14: Transport information

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

Section 15: Regulatory information

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

EPA New Zealand HSNO approval code or group standard HSR002596 - Laboratory Chemicals and Reagent Kits

National regulations There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

Certified handlers, tracking and controlled substance license requirements Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information

Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information

Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

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

International Inventories

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.
AICS	Contact supplier for inventory compliance status.

Legend:

- 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
- AICS** - Australian Inventory of Chemical Substances

Section 16: Other information

Issuing Date	14-Oct-2022
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Revision Note	Initial Release.

Key or legend to abbreviations and acronyms used in the safety data sheetLegend 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)
 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