

SAFETY DATA SHEET

New Zealand

Section 1. Identification

Product name

Mix solution; part of 'IPQ Kit'

Catalogue Number

22058655

Other means of identification

Not available.

Product type

Liquid.

Identified uses

Analytical chemistry. Laboratory chemicals

Scientific research and development

Consumer use

Supplier

Cytiva

Amersham Place Little Chalfont

Buckinghamshire HP7 9NA United Kingdom

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Cytiva New Zealand

Buddle Findlay, Level 18, Pricewaterhousecooper Tower,

188 Quay Street,

Auckland, Auckland, 1010

New Zealand

Person who prepared the SDS:

Emergency telephone number (with hours of operation)

sds author@cytiva.com

0800 733 893 (10am - 7pm)

Section 2. Hazards identification

HSNO Classification Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic

environment: 84.1%

This material is not classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

GHS label elements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

Prevention Not applicable. Response Not applicable. Storage Not applicable. Not applicable. Disposal Other hazards which do not

result in classification

None known.



Section 3. Composition/information on ingredients

Substance/mixture Mixture Other means of identification Not available

Ingredient name % (w/w) Identifiers CAS: 7647-14-5 Sodium chloride 8.1 EC: 231-598-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48

hours.

Ingestion Wash out mouth with water. If material has been swallowed and the exposed person is conscious,

give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical

personnel. Get medical attention if symptoms occur.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check Eve contact

for and remove any contact lenses. Get medical attention if irritation occurs.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation No known significant effects or critical hazards. Ingestion No known significant effects or critical hazards. Skin contact No known significant effects or critical hazards. No known significant effects or critical hazards. Eye contact

Over-exposure signs/symptoms

Inhalation No specific data. Ingestion No specific data. Skin No specific data. Eyes No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Specific treatments Not available

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed

person may need to be kept under medical surveillance for 48 hours.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable Use an extinguishing agent suitable for the surrounding fire.

Not suitable None known.

Specific hazards arising from the In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

halogenated compounds metal oxide/oxides

Hazchem code Not available

Special precautions for firefighters

decomposition products

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for

fire-fighters

chemical

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evacuate

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or

walk through spilt material. Put on appropriate personal protective equipment.

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 For emergency responders on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

Methods and material for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place

in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses,

basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in

container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

Environmental precautions

Protective measures Put on appropriate personal protective equipment (see Section 8).

hygiene

Advice on general occupational Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering

controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

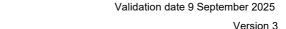
Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state Liquid. Colour Colourless. Odour Odourless. **Odour threshold** Not available. Not available. Melting point/freezing point Not available. **Boiling point or initial boiling** Not available.

point and boiling range

Flash point Not applicable. **Burning time** Not applicable. **Burning rate** Not applicable. **Evaporation rate** Not available. **Flammability** Not available Lower and upper explosive Not available.

(flammable) limits

Vapour pressure

Not available.

Vapour Pressure at 20°C Vapour pressure at 50°C

kPa Ingredient name mm Hg Method mm Hg kPa Method water 17.5 2.3 0 0

4-(2-hydroxyethyl) piperazin-

1-ylethanesulphonic acid

Relative vapour density Not available. Relative density Not available. Solubility in water Not available. Miscible with water Yes Not applicable.

Partition coefficient: n-octanol/

water

Not available.

°C °F Method Ingredient name >400 4-(2-hydroxyethyl)piperazin->752 EU A.16

1-ylethanesulphonic acid

Decomposition temperature

Auto-ignition temperature

SADT

Not available. Not available.

Viscosity Dynamic (room temperature): Not available.

Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

Flow time (ISO 2431) Not available.

Particle characteristics

Median particle size Not applicable.

Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid No specific data. Incompatible materials No specific data.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should not be

produced.

Section 11. Toxicological information

Information on likely routes of exposure

InhalationNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.Eye contactNo known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

InhalationNo specific data.IngestionNo specific data.Skin contactNo specific data.Eye contactNo specific data.

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

Acute toxicity

Not available.

Conclusion/Summary[Product] Not available.

Skin corrosion/irritation

Not available.

Conclusion/Summary[Product] Not available.

Serious eye damage/eye irritation

Not available.

Conclusion/Summary[Product] Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary[Product] Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary[Product] Not available.

Respiratory

Conclusion/Summary[Product] Not available.

Potential chronic health effects

General No known significant effects or critical hazards. Inhalation No known significant effects or critical hazards. Ingestion No known significant effects or critical hazards. Skin contact No known significant effects or critical hazards. Eye contact No known significant effects or critical hazards. Carcinogenicity No known significant effects or critical hazards. No known significant effects or critical hazards. Mutagenicity **Developmental effects** No known significant effects or critical hazards. Fertility effects No known significant effects or critical hazards.

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Chronic toxicity

Not available.

Conclusion/Summary[Product] Not available.

Carcinogenicity

Not available.

Conclusion/Summary[Product] Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary[Product] Not available.

Reproductive toxicity

Not available.

Conclusion/Summary[Product] Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Ecotoxicity No known significant effects or critical hazards.

Aquatic and terrestrial toxicity Product/ingredient name

Sodium chloride

Result

Acute - LC50 - Fresh water

Fish - Striped bass - Morone saxatilis - Larvae

1000 mg/l [96 hours] Effect: Mortality

Chronic - NOEC - Fresh water

Daphnia - Water flea - Daphnia pulex

0.314 g/l [21 days]

Effect: Reproduction

Chronic - NOEC - Fresh water

Fish - Eastern mosquitofish - Gambusia holbrooki - Adult

100 mg/l [8 weeks] Effect: Reproduction

Chronic - NOEC - Fresh water

OECD

Aquatic plants - Duckweed - Lemna minor

6 g/l [96 hours] Effect: Growth

Acute - EC50 - Fresh water

Daphnia - Water flea - Daphnia magna

402.6 mg/l [48 hours] Effect: Intoxication

Acute - EC50 - Fresh water

Algae - Green algae - Selenastrum capricornutum

28.85 mg/dm³ [72 hours] Effect: Population

Conclusion/Summary[Product] Not available.



Persistence/degradability

Not available.

Conclusion/Summary[Product] Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient

Not available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*
New Zealand Class	Not regulated.	-	-	-
		No.		
IATA Class	Not regulated.	-	-	-
		-		
		No.		
IMDG Class	Not regulated.	-	-	-
		No.		

PG* : Packing group

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to

IMO instruments

Not available.

Section 15. Regulatory information

HSNO Approval Number HSR002596

HSNO Group Standard Laboratory Chemicals and Reagent Kits

HSNO Classification Not classified.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

New Zealand Not determined.

Australia Not determined.
United States Not determined.
Canada inventory Not determined.
China Not determined.

Japan inventory (CSCL): Not determined.

Japan inventory (ISHL): Not determined.

Section 16. Other information

History

Date of printing 9 September 2025

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Date of previous issue 12/6/2022 Version 3

Key to abbreviations ADG = Australian Dangerous Goods

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified

by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

UN = United Nations

References Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.