



Fujifilm Superdol I Part B

FujiFilm

Chemwatch: 42-4004

Version No: 2.1.1.1

Material Safety Data Sheet according to NOHSC and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: 05/08/2014

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Initial Date: Not Available

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SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Fujifilm Superdol I Part B
Chemical Name	Not Applicable
Synonyms	Product Code: 850734 / 750731
Proper shipping name	ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Developer for IX Automatic processor.
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Details of the manufacturer/importer

Registered company name	FujiFilm		
Address	114 Old Pittwater Road Brookvale NSW Australia		
Telephone	+61 2 9466 2600		
Fax	+61 2 9938 1975		
Website	http://www.fujifilm.co		
Email	Not Available		

Emergency telephone number

Association / Organisation	Not Available		
Emergency telephone numbers	Not Available		
Other emergency telephone numbers	Not Available		

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS SUBSTANCE. DANGEROUS GOODS. According to the Criteria of NOHSC, and the ADG Code.

CHEMWATCH HAZARD RATINGS

	Min	Max
Flammability	1	1
Toxicity	1	1
Body Contact	2	2
Reactivity	1	1
Chronic	2	2

0 = Minimum
1 = Low
2 = Moderate
3 = High
4 = Extreme

Label elements



Relevant risk statements are found in section 2

Poisons Schedule	Not Applicable
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Risk Phrases ^[1]	R36/37/38	Irritating to eyes, respiratory system and skin.
	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	R33	Danger of cumulative effects.

Legend: 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI

Indication(s) of danger	Xi
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SAFETY ADVICE

S23	Do not breathe gas/fumes/vapour/spray.
S24	Avoid contact with skin.
S25	Avoid contact with eyes.
S26	In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.
S29	Do not empty into drains.
S35	This material and its container must be disposed of in a safe way.
S37	Wear suitable gloves.
S39	Wear eye/face protection.
S40	To clean the floor and all objects contaminated by this material, use water.
S46	If swallowed, seek medical advice immediately and show this container or label.
S56	Dispose of this material and its container at hazardous or special waste collection point.
S57	Use appropriate container to avoid environmental contamination.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

Other hazards

	Inhalation and/or ingestion may produce health damage*.
	Vapours potentially cause drowsiness and dizziness*.
	Repeated exposure potentially causes skin dryness and cracking*.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
112-27-6	60-80	triethylene glycol
64-19-7	10-20	acetic acid glacial
92-43-3	3-7	1-phenyl-3-pyrazolidinone
7732-18-5	7-15	water

SECTION 4 FIRST AID MEASURES

Description of first aid measures

Eye Contact	<p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Wash out immediately with fresh running water. ▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. ▶ Seek medical attention without delay; if pain persists or recurs seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	<p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none"> ▶ If fumes or combustion products are inhaled remove from contaminated area. ▶ Lay patient down. Keep warm and rested. ▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. ▶ Transport to hospital, or doctor, without delay. ▶ Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. ▶ Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs). ▶ As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested. ▶ Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered. <p>This must definitely be left to a doctor or person authorised by him/her. (ICSC13719)</p>

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Ingestion	<ul style="list-style-type: none"> ▶ If swallowed do NOT induce vomiting. ▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. ▶ Observe the patient carefully. ▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. ▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. ▶ Seek medical advice.
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Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

- ▶ Polyethylene glycols are generally poorly absorbed orally and are mostly unchanged by the kidney.
- ▶ Dermal absorption can occur across damaged skin (e.g. through burns) leading to increased osmolality, anion gap metabolic acidosis, elevated calcium, low ionised calcium, CNS depression and renal failure.
- ▶ Treatment consists of supportive care.

[Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

	<ul style="list-style-type: none"> ▶ Alcohol stable foam. ▶ Dry chemical powder. ▶ BCF (where regulations permit). ▶ Carbon dioxide.
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Special hazards arising from the substrate or mixture

Fire Incompatibility	▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear full body protective clothing with breathing apparatus. ▶ Prevent, by any means available, spillage from entering drains or water course. ▶ Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Combustible. ▶ Slight fire hazard when exposed to heat or flame. ▶ Acids may react with metals to produce hydrogen, a highly flammable and explosive gas. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills	<ul style="list-style-type: none"> ▶ Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material. ▶ Check regularly for spills and leaks. <p>Slippery when spilt.</p> <ul style="list-style-type: none"> ▶ Clean up all spills immediately.
Major Spills	<p>Slippery when spilt.</p> <ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear full body protective clothing with breathing apparatus.
	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<ul style="list-style-type: none"> ▶ DO NOT allow clothing wet with material to stay in contact with skin ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Avoid contact with moisture.
Other information	<ul style="list-style-type: none"> ▶ Material is hygroscopic, i.e. absorbs moisture from the air. Keep containers well sealed in storage. ▶ Store in original containers. ▶ Keep containers securely sealed.

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ DO NOT use aluminium or galvanised containers ▶ Check regularly for spills and leaks ▶ Lined metal can, lined metal pail/ can. ▶ Plastic pail. ▶ Polyliner drum. ▶ Packing as recommended by manufacturer.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air. ▶ Segregate from alkalies, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates. ▶ Avoid strong acids, bases.

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PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA


Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	acetic acid glacial	Acetic acid	25 mg/m3 / 10 ppm	37 mg/m3 / 15 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	TEEL-0	TEEL-1	TEEL-2	TEEL-3
triethylene glycol	300 ppm	500 ppm	500 ppm	500 ppm
acetic acid glacial	5 ppm	5 ppm	35 ppm	250 ppm
water	500 ppm	500 ppm	500 ppm	500 ppm

Ingredient	Original IDLH	Revised IDLH
triethylene glycol	Not Available	Not Available
acetic acid glacial	1,000 ppm	50 ppm
1-phenyl-3-pyrazolidinone	Not Available	Not Available
water	Not Available	Not Available

Exposure controls

Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	<ul style="list-style-type: none"> Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	<ul style="list-style-type: none"> Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p>
Body protection	See Other protection below
Other protection	<ul style="list-style-type: none"> Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

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Material	CPI
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* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as

Respiratory protection

Type AB-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	AB-AUS P2	-	AB-PAPR-AUS / Class 1 P2
up to 50 x ES	-	AB-AUS / Class 1 P2	-
up to 100 x ES	-	AB-2 P2	AB-PAPR-2 P2 ^

Continued...

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"feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear brownish-orange liquid with acetic acid odour; mixes with water.		
Physical state	Liquid	Relative density (Water = 1)	1.113
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	0	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Miscible	pH as a solution(1%)	Not Available
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	► Contact with alkaline material liberates heat
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system.
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual. The toxic effects of glycols (dihydric alcohols), following ingestion are similar to those of alcohol, with depression of the central nervous system (CNS), nausea, vomiting and degenerative changes in liver and kidney. Effects on the nervous system characterise over-exposure to higher aliphatic alcohols. These include headache, muscle weakness, giddiness, ataxia, (loss of muscle coordination), confusion, delirium and coma.
Skin Contact	The material may accentuate any pre-existing dermatitis condition Most liquid alcohols appear to act as primary skin irritants in humans. Significant percutaneous absorption occurs in rabbits but not apparently in man. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	Direct eye contact with acid corrosives may produce pain, lachrymation, photophobia and burns. Mild burns of the epithelia generally recover rapidly and completely. Severe burns produce long-lasting and possible irreversible damage. The appearance of the burn may not be apparent for several weeks after the initial contact.
Chronic	Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems. Repeated or prolonged exposure to acids may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur.

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	Oral (Rat) LD50: >5000 mg/l*	Not Available
triethylene glycol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 11890 mg/kg	Eyes (rabbit) (-) Mild
	Intraperitoneal (Mouse) LD50: 8141 mg/kg	Skin (rabbit) 500 mg/24h Mild
	Intravenous (Guinea pig) LD50: 10600 mg/kg	
	Intravenous (Mouse) LD50: 6500 mg/kg	
	Intravenous (Rabbit) LD50: 1900 mg/kg	
	Intravenous (Rat) LD50: 11700 mg/kg	
	Oral (Guinea pig) LD50: 7900 mg/kg	
	Oral (Mouse) LD50: 20000 mg/kg	
	Oral (Rabbit) LD50: 8400 mg/kg	
	Oral (Rat) LD50: 15000 mg/kg	
	Oral (rat) LD50: 17000 mg/kg	
	Subcutaneous (Mouse) LD50: 8750 mg/kg	
	Not Available	Not Available
acetic acid glacial	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 1060 mg/kg	Eye (rabbit): 0.05mg (open)-SEVERE
	Oral (rat) LD50: 3310 mg/kg	Skin (human):50mg/24hr - mild
	Not Available	Skin (rabbit):525mg (open)-SEVERE
1-phenyl-3-pyrazolidinone	TOXICITY	IRRITATION
	Intraperitoneal (rat) LD50: 200 mg/kg	
	Oral (rat) LD50: 200 mg/kg	
water	Not Available	Not Available
	TOXICITY	IRRITATION
	Not Available	Not Available

* Value obtained from manufacturer's msds

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

TRIETHYLENE GLYCOL	For triethylene glycol : Reproductive Data: Reproductivity tests in animals have been negative. Mutagenicity Data: No adverse mutagenic effects are anticipated. Teratogenicity Data: Teratogenicity tests in animals have been negative. Respiratory / Skin Sensitization Data: None known. Synergistic Materials: Alcohols/Glycols: Alcohols may interact synergistically with chlorinated solvents (example - carbon tetrachloride, chloroform, bromotrichloromethane), dithiocarbamates (example - disulfiram), dimethylnitrosamine and thioacetamide. Other Studies Relevant to Material: Triethylene Glycol was given to rats by inclusion in the diet for 90 days at concentrations of 10,000, 20,000, or 50,000 ppm. At the highest dose, there were decreases in body weight. Physiologic responses to these high doses were observed in kidney weight and urinalysis. No specific organ toxicity was seen. In a 9-day (whole body) repeated exposure (6 h/day) study with rats, mortality occurred at 4,284 mg/M3 and effects included eye irritation and increased alanine aminotransferase and alkaline phosphatase activities; at 494 mg/M3, there was slightly increased alkaline phosphatase activity. In a sensory irritation study in mice, exposure to high concentrations of triethylene glycol aerosol resulted in decreased respiratory rate. The RD50, or concentration that produced a 50% decrease in respiratory rate, was 5.1 mg/L.
WATER	No significant acute toxicological data identified in literature search.
TRIETHYLENE GLYCOL, ACETIC ACID GLACIAL	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.

Acute Toxicity	☹	Carcinogenicity	☹
Skin Irritation/Corrosion	✓	Reproductivity	☹
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	✓

Continued...

Respiratory or Skin sensitisation	⊖	STOT - Repeated Exposure	✓
Mutagenicity	⊖	Aspiration Hazard	⊖

Legend: ✓ – Data required to make classification available
 ✗ – Data available but does not fill the criteria for classification
 ⊖ – Data Not Available to make classification

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION**Toxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Prevent, by any means available, spillage from entering drains or water courses.

DO NOT discharge into sewer or waterways.**Persistence and degradability**

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available

Mobility in soil

Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS**Waste treatment methods**

Product / Packaging disposal	<ul style="list-style-type: none"> Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.
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SECTION 14 TRANSPORT INFORMATION**Labels Required**

	
Marine Pollutant	NO
HAZCHEM	2R

Land transport (ADG)

UN number	2790				
Packing group	III				
UN proper shipping name	ACETIC ACID SOLUTION, more than 10% and less than 50% acid, by mass				
Environmental hazard	No relevant data				
Transport hazard class(es)	<table> <tr> <td>Class</td><td>8</td></tr> <tr> <td>Subrisk</td><td>Not Applicable</td></tr> </table>	Class	8	Subrisk	Not Applicable
Class	8				
Subrisk	Not Applicable				
Special precautions for user	<table> <tr> <td>Special provisions</td><td>Not Applicable</td></tr> <tr> <td>Limited quantity</td><td>5 L</td></tr> </table>	Special provisions	Not Applicable	Limited quantity	5 L
Special provisions	Not Applicable				
Limited quantity	5 L				

Air transport (ICAO-IATA / DGR)

UN number	2790
Packing group	III
UN proper shipping name	Acetic acid solution more than 10% but less than 50% acid, by weight
Environmental hazard	No relevant data

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Transport hazard class(es)	ICAO/IATA Class	8
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	8L
Special precautions for user	Special provisions	A803
	Cargo Only Packing Instructions	856
	Cargo Only Maximum Qty / Pack	60 L
	Passenger and Cargo Packing Instructions	852
	Passenger and Cargo Maximum Qty / Pack	5 L
	Passenger and Cargo Limited Quantity Packing Instructions	Y841
	Passenger and Cargo Limited Maximum Qty / Pack	1 L

Sea transport (IMDG-Code / GGVSee)

UN number	2790		
Packing group	III		
UN proper shipping name	ACETIC ACID SOLUTION more than 10% and less than 50% acid, by mass		
Environmental hazard	No relevant data		
Transport hazard class(es)	IMDG Class	8	
	IMDG Subrisk	Not Applicable	
Special precautions for user	EMS Number	F-A , S-B	
	Special provisions	Not Applicable	
	Limited Quantities	5 L	

Transport in bulk according to Annex II of MARPOL 73 / 78 and the IBC code

Source	Ingredient	Pollution Category
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk	acetic acid glacial	Z

SECTION 15 REGULATORY INFORMATION

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

triethylene glycol(112-27-6) is found on the following regulatory lists	"International Council of Chemical Associations (ICCA) - High Production Volume List", "FisherTransport Information", "IMO MARPOL 73/78 (Annex II) - List of Other Liquid Substances", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix B (Part 3)", "Australia Inventory of Chemical Substances (AICS)", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-AldrichTransport Information", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "OECD Existing Chemicals Database", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "International Fragrance Association (IFRA) Survey: Transparency List"
acetic acid glacial(64-19-7) is found on the following regulatory lists	"Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix F (Part 3)", "Australia Illicit Drug Reagents/Essential Chemicals - Category III", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk", "International Council of Chemical Associations (ICCA) - High Production Volume List", "IOFI Global Reference List of Chemically Defined Substances", "International Maritime Dangerous Goods Requirements (IMDG Code)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5", "Australia Exposure Standards", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia FAISD Handbook - Safety Directions", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2", "Australia FAISD Handbook - First Aid Instructions, Warning Statements, and General Safety Precautions", "FisherTransport Information", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "OSPAR National List of Candidates for Substitution – Norway", "WHO Model List of Essential Medicines - Adults", "OECD List of High Production Volume (HPV) Chemicals", "Joint FAO/WHO Expert Committee on Food Additives (JECFA) - Specifications for Flavourings", "Australia Inventory of Chemical Substances (AICS)", "International Numbering System for Food Additives", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "Australia High Volume Industrial Chemical List (HVICL)", "Australia National Pollutant Inventory", "OECD Existing Chemicals Database", "Sigma-AldrichTransport Information", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Appendix E (Part 2)", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "Australia Hazardous Substances Information System - Consolidated Lists", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "International Air Transport Association (IATA) Dangerous Goods Regulations", "International Fragrance Association (IFRA) Survey: Transparency List", "Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 6", "IMO IBC Code Chapter 17: Summary of minimum requirements"
1-phenyl-3-pyrazolidinone(92-43-3) is found on the following regulatory lists	"International Maritime Dangerous Goods Requirements (IMDG Code)", "International Maritime Dangerous Goods Requirements (IMDG Code) - Substance Index", "Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes", "FisherTransport Information", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English)", "Australia Inventory of Chemical Substances (AICS)", "Belgium Federal Public Service Mobility and Transport, Regulations concerning the International Carriage of Dangerous Goods by Rail - Table A: Dangerous Goods List - RID 2013 (Dutch)", "Australia National Pollutant Inventory", "Sigma-AldrichTransport Information", "United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (Spanish)", "Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List", "International Air Transport Association (IATA) Dangerous Goods Regulations", "Australia Hazardous Substances Information System - Consolidated Lists"
water(7732-18-5) is found on the following regulatory lists	"Australia Inventory of Chemical Substances (AICS)", "OECD List of High Production Volume (HPV) Chemicals", "OSPAR National List of Candidates for Substitution – Norway", "WHO Model List of Essential Medicines - Adults", "Sigma-AldrichTransport Information", "IMO IBC Code Chapter 18: List of products to which the Code does not apply", "Australia High Volume Industrial Chemical List (HVICL)", "International Fragrance Association (IFRA) Survey: Transparency List"

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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