#### **BODYWRAP BANDAGE**

#### **Barnes Products P/L**

Chemwatch: **72-6642**Version No: **6.2** 

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 2

Issue Date: **15/03/2023**Print Date: **29/03/2023**S.GHS.AUS.EN.E

#### SECTION 1 Identification of the substance / mixture and of the company / undertaking

#### **Product Identifier**

Product name	BODYWRAP BANDAGE
Chemical Name	Not Applicable
Synonyms	BODYWRAP BANAGE - ALL SIZES
Chemical formula	Not Applicable
Other means of identification	Not Available

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

Relevant identified uses Casting material. Life casting.

#### Details of the manufacturer or supplier of the safety data sheet

Registered company name	Barnes Products P/L	
Address	5 Greenhills Avenue Moorebank NSW 2170 Australia	
Telephone	+61 2 9793 7555	
Fax	+61 2 9793 7091	
Website	http://www.barnes.com.au/	
Email	sales@barnes.com.au	

#### **Emergency telephone number**

Association / Organisation	Barnes Products Pty Ltd
Emergency telephone numbers	+61 2 9793 7555 Business Hours
Other emergency telephone numbers	Poisons Information Centre 13 1126 after hours

#### **SECTION 2 Hazards identification**

#### Classification of the substance or mixture

#### HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

#### Chemwatch Hazard Ratings

	Min	Max	
Flammability	0	į	
Toxicity	0		
Body Contact	2		0 = Minimum 1 = Low
Reactivity	0		2 = Moderate
Chronic	0		3 = High 4 = Extreme

Poisons Schedule	Not Applicable
Classification [1]	Serious Eye Damage/Eye Irritation Category 2B
Legend:	1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

#### Label elements

Hazard pictogram(s) Not Applicable	
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Signal word Warning

#### Hazard statement(s)

H320

Causes eye irritation.

#### Precautionary statement(s) Prevention

P264

Wash all exposed external body areas thoroughly after handling.

#### Precautionary statement(s) Response

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313

If eye irritation persists: Get medical advice/attention.

#### Precautionary statement(s) Storage

Not Applicable

#### Precautionary statement(s) Disposal

Not Applicable

#### **SECTION 3 Composition / information on ingredients**

#### **Substances**

See section below for composition of Mixtures

#### **Mixtures**

CAS No	%[weight]	Name
10034-76-1	>80	calcium sulfate hemihydrate
7778-18-9	NotSpec	calcium sulfate
Not Available	<20	woven gauze
Legend: 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L * EU IOELVs available		

#### **SECTION 4 First aid measures**

#### **Description of first aid measures**

Eye Contact	If this product comes in contact with the eyes:  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	If skin contact occurs:  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> <li>If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>Other measures are usually unnecessary.</li> </ul>
Ingestion	Treat symptoms of obstruction of airways. Seek medical attention.

## Indication of any immediate medical attention and special treatment needed

Ingestion of sufficient material could cause physical obstruction.

Treat symptomatically.

#### **SECTION 5 Firefighting measures**

#### **Extinguishing media**

- ▶ There is no restriction on the type of extinguisher which may be used.
- Use extinguishing media suitable for surrounding area.

#### Special hazards arising from the substrate or mixture

Fire Incompatibility

None known.

#### Advice for firefighters

Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> <li>If safe to do so, remove containers from path of fire.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Non combustible.</li> <li>Not considered a significant fire risk, however containers may burn.</li> <li>Decomposition may produce toxic fumes of: sulfur oxides (SOx)</li> <li>May emit corrosive fumes.</li> </ul>
HAZCHEM	Not Applicable

#### **SECTION 6 Accidental release measures**

## Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

#### Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing dust and contact with skin and eyes.</li> <li>Wear protective clothing, gloves, safety glasses and dust respirator.</li> <li>Use dry clean up procedures and avoid generating dust.</li> <li>Sweep up, shovel up or</li> <li>Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).</li> <li>Place spilled material in clean, dry, sealable, labelled container.</li> </ul>
Major Spills	Moderate hazard.  CAUTION: Advise personnel in area.  Alert Emergency Services and tell them location and nature of hazard.  Control personal contact by wearing protective clothing.  Prevent, by any means available, spillage from entering drains or water courses.  Recover product wherever possible.  IF DRY: Use dry clean up procedures and avoid generating dust.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

#### **SECTION 7 Handling and storage**

## Precautions for safe handling

Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>DO NOT allow material to contact humans, exposed food or food utensils.</li> <li>Avoid contact with incompatible materials.</li> </ul>
Other information	<ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry area protected from environmental extremes.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>For major quantities:</li> <li>Consider storage in bunded areas - ensure storage areas are isolated from sources of community water (including stormwater, ground water, lakes and streams).</li> <li>Ensure that accidental discharge to air or water is the subject of a contingency disaster management plan; this may require consultation with local authorities.</li> </ul>

## Conditions for safe storage, including any incompatibilities

Suitable container	▶ Packaging as recommended by manufacturer.
Storage incompatibility	None known

#### **Control parameters**

#### Occupational Exposure Limits (OEL)

#### **INGREDIENT DATA**

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	calcium sulfate hemihydrate	Calcium sulphate	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.
Australia Exposure Standards	calcium sulfate	Calcium sulphate	10 mg/m3	Not Available	Not Available	(a) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

#### **Emergency Limits**

Ingredient	TEEL-1	TEEL-2	TEEL-3
BODYWRAP BANDAGE	Not Available	Not Available	Not Available

Ingredient	Original IDLH	Revised IDLH
calcium sulfate hemihydrate	Not Available	Not Available
calcium sulfate	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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.

#### Individual protection measures, such as personal protective equipment









## Eye and face protection

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. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.

#### Skin protection

#### See Hand protection below

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.

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.

Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids,

Hands/feet protection Experience indicates that the following power abrasive particles are not present.

- ▶ polychloroprene.
- nitrile rubber.
- butyl rubber.
- In fluorocaoutchouc.
- ▶ polyvinyl chloride.

Gloves should be examined for wear and/ or degradation constantly.

#### Body protection

## See Other protection below

#### Other protection

- Overalls.P.V.C apron.
- ► Barrier cream.
- ► Skin cleansing cream.
- Eye wash unit.

#### Respiratory protection

Respiratory protection not normally required due to the physical form of the product.

## Information on basic physical and chemical properties

Appearance	White solid. Plaster of Paris impregnated onto a woven gauze bandage.				
Physical state	Manufactured	Relative density (Water = 1)	Not Available		
Odour	Not Available	Partition coefficient n-octanol / water	Not Available		
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable		
pH (as supplied)	Not Applicable	Decomposition temperature (°C)	Not Available		
Melting point / freezing point (°C)	Not Applicable	Viscosity (cSt)	Not Applicable		
Initial boiling point and boiling range (°C)	Not Applicable	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 Applicable		
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable		
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available		
Solubility in water	Not Available	pH as a solution (1%)	Not Applicable		
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available		

## **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	Product is considered stable and hazardous polymerisation will not occur.
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**

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Information on toxicologic	cal effects
Inhaled	Levels above 10 micrograms per cubic metre of suspended inorganic sulfates in the air may cause an excess risk of asthmatic attacks in susceptible people.  Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.  If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.  There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Ingestion	Ingestion of Plaster of Paris bandage before being wetted may result in hardening after absorbing moisture from the G.I. tract, potentially resulting in obstruction of airways. No symptoms expected from ingestion of small amounts of the hardened bandage. Sulfates are not well absorbed orally, but can cause diarrhoea.  The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
Skin Contact	There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.  Four students received severe hand burns whilst making moulds of their hands with dental plaster substituted for Plaster of Paris.  The dental plaster known as "Stone" was a special form of calcium sulfate hemihydrate containing alpha-hemihydrate crystals that provide high compression strength to the moulds. Beta-hemihydrate (normal Plaster of Paris) does not cause skin burns in similar circumstances.  Open cuts, abraded or irritated skin should not be exposed to this material  Entry into the blood-stream, through, for example, cuts, abrasions 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	There is some evidence to suggest that this material can cause eye irritation and damage in some persons.

#### Chronic

Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

	TOXICITY	IRRITATION	
BODYWRAP BANDAGE	Not Available	Not Available	
	TOXICITY	IRRITATION	
calcium sulfate hemihydrate	Inhalation(Rat) LC50: >3.26 mg/l4h <sup>[1]</sup>	Not Available	
	Oral (Rat) LD50: >1581 mg/kg <sup>[1]</sup>		
	TOXICITY	IRRITATION	
calcium sulfate	Inhalation(Rat) LC50: >3.26 mg/l4h <sup>[1]</sup>	Not Available	
	Oral (Rat) LD50: >1581 mg/kg <sup>[1]</sup>		
Legend:	Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS.     Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		

## CALCIUM SULFATE HEMIHYDRATE

No significant acute toxicological data identified in literature search.

Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.

# CALCIUM SULFATE HEMIHYDRATE & CALCIUM SULFATE

Gypsum (calcium sulfate dehydrate) irritates the skin, eye, mucous membranes, and airways. A series of studies involving Gypsum industry workers in Poland reported chronic, non-specific airways diseases.

Repeat dose toxicity: Examination of workers at a gypsum manufacturing plant found restrictive defects on long-function tests in those who were chronically exposed to gypsum dust.

Synergistic/antagonistic effects: Gypsum appears to be protective on quartz toxicity in animal testing. On the other hand, it tended to aggravate tuberculosis in animals.

Cytotoxicity: Tests results regarding cytotoxicity have been negative.

Cancer-causing potential: Tests involving animals produced mixed results; no causal relationship between gypsum and tumour formation was found.

Genetic toxicity: Test on bacterial cells have shown negative results.

Developmental toxicity: In animal testing, developmental toxicity was not seen.

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	×	Reproductivity	×
Serious Eye Damage/Irritation	<b>~</b>	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×

**Legend: X** − Data either not available or does not fill the criteria for classification

✓ – Data available to make classification

#### **SECTION 12 Ecological information**

#### **Toxicity**

	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available  Available		Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	>79mg/l	2
calcium sulfate hemihydrate	LC50	96h	Fish	>79mg/l	2
	NOEC(ECx)	0.25h	Fish	75mg/l	4
	EC50	96h	Algae or other aquatic plants	3200mg/l	4

	Endpoint	Test Duration (hr)	Species	Value	Source	
	EC50	72h	Algae or other aquatic plants	>79mg/l	2	
calcium sulfate	LC50	96h	Fish	>79mg/l	2	
	NOEC(ECx)	0.25h	Fish	75mg/l	4	
	EC50	96h	Algae or other aquatic plants	3200mg/l	4	
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data					

**DO NOT** discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
calcium sulfate hemihydrate	HIGH	HIGH
calcium sulfate	HIGH	HIGH

#### **Bioaccumulative potential**

Ingredient	Bioaccumulation	
calcium sulfate hemihydrate	LOW (LogKOW = -2.2002)	
calcium sulfate	LOW (LogKOW = -2.2002)	

#### Mobility in soil

Ingredient	Mobility	
calcium sulfate hemihydrate	LOW (KOC = 6.124)	
calcium sulfate	LOW (KOC = 6.124)	

#### **SECTION 13 Disposal considerations**

#### Waste treatment methods

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- ▶ Where in doubt contact the responsible authority.
- ▶ 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.

#### **SECTION 14 Transport information**

Product / Packaging

disposal

#### **Labels Required**

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

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

Not Applicable

## Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
calcium sulfate hemihydrate	Not Available
calcium sulfate	Not Available

## Transport in bulk in accordance with the IGC Code

Product name	Ship Type
calcium sulfate hemihydrate	Not Available
calcium sulfate	Not Available

#### **SECTION 15 Regulatory information**

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

calcium sulfate hemihydrate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

calcium sulfate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

#### **National Inventory Status**

National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	Yes		
Canada - DSL	Yes		
Canada - NDSL	No (calcium sulfate hemihydrate; calcium sulfate)		
China - IECSC	Yes		
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	Yes		
Korea - KECI	Yes		
New Zealand - NZIoC	Yes		
Philippines - PICCS	Yes		
USA - TSCA	Yes		
Taiwan - TCSI	Yes		
Mexico - INSQ	Yes		
Vietnam - NCI	Yes		
Russia - FBEPH	Yes		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.		

#### **SECTION 16 Other information**

Revision Date	15/03/2023
Initial Date	08/03/2017

#### **SDS Version Summary**

Version	Date of Update	Sections Updated
6.1	15/03/2023	Hazards identification - Classification, Identification of the substance / mixture and of the company / undertaking - Synonyms
6.2	16/03/2023	Hazards identification - Classification, Identification of the substance / mixture and of the company / undertaking - Supplier Information, Identification of the substance / mixture and of the company / undertaking - Synonyms

#### 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.

The 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.

#### **Definitions and abbreviations**

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

IDLH: Immediately Dangerous to Life or Health Concentrations

ES: Exposure Standard OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

AIIC: Australian Inventory of Industrial Chemicals

DSL: Domestic Substances List NDSL: Non-Domestic Substances List

IECSC: Inventory of Existing Chemical Substance in China

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

NLP: No-Longer Polymers

ENCS: Existing and New Chemical Substances Inventory

KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals

PICCS: Philippine Inventory of Chemicals and Chemical Substances

TSCA: Toxic Substances Control Act
TCSI: Taiwan Chemical Substance Inventory
INSQ: Inventario Nacional de Sustancias Químicas

NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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