## **GSB** Chemical Co.

Chemwatch: 21-9579 Version No: 4.1.1.1

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 1

Issue Date: 12/07/2014 Print Date: 09/11/2015 Initial Date: Not Available S.GHS.AUS.EN

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

## **Product Identifier**

Product name	844 Fountain Stimulation Driers		
Synonyms	Not Available		
Other means of identification	Not Available		
Relevant identified uses of the substance or mixture and uses advised against			
Relevant identified uses	Use according to manufacturer's directions. Additive to speed drying in Lithographic Printing process.		

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

Registered company name	GSB Chemical Co.
Address	84 Camp Road Broadmeadows 3047 VIC Australia
Telephone	+61 3 9457 1125 (8am-5pm, Monday - Friday)
Fax	+61 3 9459 7978
Website	Not Available
Email	info@gsbchem.com.au

#### Emergency telephone number

Association / Organisation	Not Available
Emergency telephone numbers	+61 3 9457 1125 (8am-5pm, Monday - Friday)
Other emergency telephone numbers	13 11 26 (After hours)

## **SECTION 2 HAZARDS IDENTIFICATION**

## Classification of the substance or mixture

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

Poisons Schedule	Not Applicable	
GHS Classification	Not Applicable	
Label elements		
GHS label elements	Not Applicable	
SIGNAL WORD	NOT APPLICABLE	
Hazard statement(s)		
Not Applicable		
Precautionary statement(s)	Prevention	
Not Applicable		
Precautionary statement(s)	Response	
Not Applicable		
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
Not Available	<10	cobalt complex
Not Available	balance	ingredients at levels determined not to be hazardous
7732-18-5	60-100	water

## SECTION 4 FIRST AID MEASURES

#### Description of first aid measures

Eye Contact	<ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>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.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
Skin Contact	<ul> <li>If skin contact occurs:</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>
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	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

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

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> <li>Equipment should be thoroughly decontaminated after use.</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; metal oxidesMay emit poisonous fumes.</li> </ul>			

## SECTION 6 ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

• •	
Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>Wipe up.</li> <li>Place in a suitable, labelled container for waste disposal.</li> </ul>
Major Spills	<ul> <li>Moderate hazard.</li> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Stop leak if safe to do so.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Neutralise/decontaminate residue (see Section 13 for specific agent).</li> <li>Collect solid residues and seal in labelled drums for disposal.</li> <li>Wash area and prevent runoff into drains.</li> <li>After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.</li> </ul>

If contamination of drains or waterways occurs, advise emergency services.

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

## SECTION 7 HANDLING AND STORAGE

## Precautions for safe handling

Avoid all personal contact, including inhalation.

Safe handling	<ul> <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> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> <li>Avoid physical damage to containers.</li> <li>Always wash hands with soap and water after handling.</li> <li>Work clothes should be laundered separately. Launder contaminated clothing before re-use.</li> <li>Use good occupational work practice.</li> </ul>
Other information	<ul> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</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> </ul>

Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>Polyethylene or polypropylene container.</li> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> </ul>
Storage incompatibility	<ul> <li>Avoid strong bases.</li> <li>Avoid reaction with amines</li> <li>ammonia</li> <li>Avoid reaction with oxidising agents</li> </ul>

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control parameters**

## OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

## EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
844 Fountain Stimulation Driers	Not Available	Not Available	Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH	
cobalt complex	Not Available		Not Available	
ingredients at levels determined not to be hazardous	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 or 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 stra "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilati the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure. General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances. If exists, wear approved respirator. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensu Provide adequate ventilation in warehouses and enclosed storage areas. Air contaminants generated in the workplace possess varying which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.	ontrols can be highly itegically "adds" and on system must match risk of overexposure ire adequate protection. g "escape" velocities
	Type of Contaminant:	Air Speed:
	solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min)

	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating 0.5-1 m/s (100-200 acid fumes, pickling (released at low velocity into zone of active generation) f/min.)		
	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) 1-2.5 m/s (200-500 f/min.)		
	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid 2.5-10 m/s (500-2000 r/min.)		
	Within each range the appropriate value depends on:		
	Lower end of the range	Upper end of the range	
	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	
	2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity	
	3: Intermittent, low production.	3: High production, heavy use	
	4: Large hood or large air mass in motion	4: Small hood-local control only	
	Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extr of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point distance from the contaminating source. The air velocity at the extraction fan, for example, should be solvents generated in a tank 2 meters distant from the extraction point. Other mechanical consideration apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when	raction pipe. Velocity generally dec should be adjusted, accordingly, a a minimum of 1-2 m/s (200-400 f/n ons, producing performance defici extraction systems are installed o	reases with the square fter reference to nin) for extraction of s within the extraction r used.
Personal protection			
Eye and face protection	<ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>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. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>		
Skin protection	See Hand protection below		
Hands/feet protection	<ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>The selection of suitable gloves does not only depend on the material, but also on further marks of que the chemical is a preparation of several substances, the resistance of the glove material can not be created to the application.</li> <li>The exact break through time for substances has to be obtained from the manufacturer of the protective choice.</li> <li>Suitability and durability of glove type is dependent on usage. Important factors in the selection of glove herein and the intervence of glove the intervence of glove the intervence of glove material,</li> <li>chemical resistance of glove material,</li> <li>glove thickness and</li> <li>dexterity</li> <li>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or nation according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>When only brief contact is expected, a glove with a protection class of 5 or according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>Some glove polymer types are less affected by movement and this should be taken into account to Contaminated gloves should be replaced.</li> <li>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried tho recommended.</li> </ul>	ality which vary from manufacturer alculated in advance and has there re gloves and has to be observed v ves include: nal equivalent). r higher (breakthrough time greate time greater than 60 minutes acc when considering gloves for long-fu roughly. Application of a non-perfu	to manufacturer. Where fore to be checked prior when making a final r than 240 minutes ording to EN 374, AS/NZS erm use. med moisturiser is
Body protection	See Other protection below		
Other protection	<ul> <li>Overalls.</li> <li>P.V.C. apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eye wash unit.</li> </ul>		
Thermal hazards	Not Available		

## **Respiratory protection**

Not Available

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

# Information on basic physical and chemical properties

Appearance	Pink liquid with a characteristic odour; miscible with water.		
Physical state	#00Liquid	Relative density (Water = 1)	1.05
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable

pH (as supplied)	Not Available	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	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)	>90
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	#01miscible	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	<ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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	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. Not normally a hazard due to non-volatile nature of product			
Ingestion	Accidental ingestion of the material may be damaging to the h	nealth of the individua	l.	
Skin Contact	There is some evidence to suggest that this material can caus Open cuts, abraded or irritated skin should not be exposed to	se inflammation of the this material	e skin on conta	ct in some persons.
Eye	There is some evidence to suggest that this material can caus	se eye irritation and d	lamage in som	e persons.
Chronic	Long-term exposure to the product is not thought to produce on nevertheless exposure by all routes should be minimised as a	chronic effects advers matter of course.	se to the health	n (as classified by EC Directives using animal models);
844 Fountain Stimulation Driers	TOXICITY IRRITATION			
		i		
	ΤΟΧΙΟΙΤΥ		IRRITATION	
cobait complex	Not Available Not Available			
ingredients at levels	ΤΟΧΙΟΙΤΥ		IRRITATION	
hazardous	Not Available		Not Available	
	TOXICITY		IRRITATION	
water	Oral (rat) LD50: >90000 mg/kg <sup>[2]</sup>	50: >90000 mg/kg <sup>[2]</sup> Not Available		
Legend:	1. 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			
Acute Toxicity	0	Care	cinogenicity	0
Skin Irritation/Corrosion	0	Rep	productivity	0
Serious Eye Damage/Irritation	0	STOT - Singl	le Exposure	0
Respiratory or Skin sensitisation	$\otimes$	STOT - Repeate	d Exposure	$\otimes$
Mutagenicity	$\otimes$	Aspira	tion Hazard	$\otimes$
		L	.egend: 🗙	- Data available but does not fill the criteria for classification

✓ – Data required to make classification available

🚫 – Data Not Available to make classification

## **SECTION 12 ECOLOGICAL INFORMATION**

#### Toxicity

Ingredient	Endpoint	Test Duration	Species	Value	Source
water	LC50	96	Fish	897.5200mg/L	3
water	EC50	96	Algae or other aquatic plants	8768.8740mg/L	3

For Metal:

Atmospheric Fate - Metal-containing inorganic substances generally have negligible vapour pressure and are not expected to partition to air.

Environmental Fate: Environmental processes, such as oxidation, the presence of acids or bases and microbiological processes, may transform insoluble metals to more soluble ionic forms. Environmental processes may enhance bioavailability and may also be important in changing solubilities.

Aquatic/Terrestrial Fate: When released to dry soil, most metals will exhibit limited mobility and remain in the upper layer; some will leach locally into ground water and/ or surface water ecosystems when soaked by rain or melt ice. A metal ion is considered infinitely persistent because it cannot degrade further. Once released to surface waters and moist soils their fate depends on solubility and dissociation in water. A significant proportion of dissolved/ sorbed metals will end up in sediments through the settling of suspended particles. The remaining metal ions can then be taken up by aquatic organisms. Ionic species may bind to dissolved ligands or sorb to solid particles in water.

Ecotoxicity: Even though many metals show few toxic effects at physiological pH levels, transformation may introduce new or magnified effects.

DO NOT discharge into sewer or waterways

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
water	LOW	LOW

## **Bioaccumulative potential**

Ingredient	Bioaccumulation
water	LOW (LogKOW = -1.38)

## Mobility in soil

Ingredient	Mobility
water	LOW (KOC = 14.3)

## SECTION 13 DISPOSAL CONSIDERATIONS

#### Waste treatment methods

	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
	A Hierarchy of Controls seems to be common - the user should investigate:
	▶ Reduction
	▶ Reuse
	▶ Recycling
	► Disposal (if all else fails)
	This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be
	possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type.
Product / Packaging	Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
disposal	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.
	Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility
	can be identified.
	Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or incineration in a licenced apparatus (after
	admixture with suitable combustible material).
	Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

#### **SECTION 14 TRANSPORT INFORMATION**

Marine Pollutant

HAZCHEM

#### Labels Required

NO 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

#### **SECTION 15 REGULATORY INFORMATION**

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

Not Applicable

Not Applicable

## WATER(7732-18-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Inventory of Chemical Substances (AICS)
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National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (water)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (water)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

#### **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

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.

#### 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 OSF: Odour Safety Factor NOAEL : No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index