BERYLLIUM SULPHATE

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME
BERYLLIUM SULFATE

OTHER NAMES

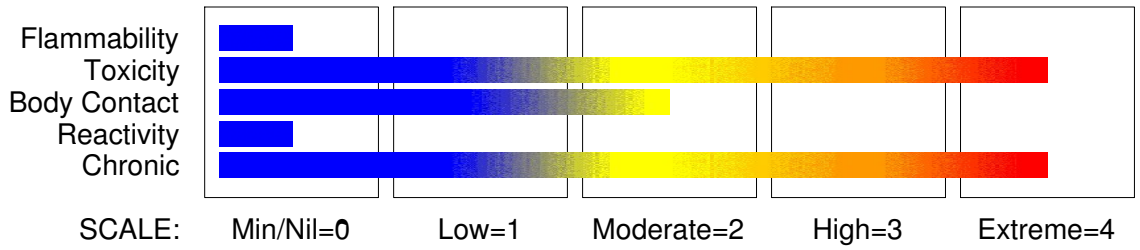
Be-O4-S, BeSO4, "beryllium sulphate", "sulphuric acid, beryllium salt (1:1)", "sulfuric acid, beryllium salt (1:1)"

PROPER SHIPPING NAME
BERYLLIUM COMPOUND, N.O.S.
(contains beryllium sulfate)

PRODUCT USE
Used in the production of metallic beryllium by the sulfate process.

SUPPLIER
Company: S D FINE- CHEM LIMITED
Address:
315- 317, T.V. INDUSTRIAL ESTATE,
248, WORLI,
MUMBAI- 400030.INDIA.
technical@sdfine.com
Telephone: 91- 22- 24959898
Telephone: 91- 22- 24959899
Fax: 91- 22- 24937232

HAZARD RATINGS



Section 2 - HAZARDS IDENTIFICATION

GHS Classification
Acute Toxicity (Inhalation) Category 2

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Acute Toxicity (Oral) Category 3
Carcinogen Category 1B
Chronic Aquatic Hazard Category 2
Eye Irritation Category 2A
Organ Damage Category 1
Respiratory Irritation Category 3
Respiratory Sensitizer Category 1
Skin Corrosion/Irritation Category 2
Skin Sensitizer Category 1

EMERGENCY OVERVIEW

HAZARD

DANGER
Determined using GHS criteria:
H335 H330 H301 H315 H319 H334 H317 H350 H372 H411
May cause respiratory irritation
Fatal if inhaled
Toxic if swallowed
Causes skin irritation
Causes serious eye irritation
May cause allergic or asthmatic symptoms or breathing difficulties if inhaled
May cause allergic skin reaction
May cause cancer by inhalation
Causes damage to organs through prolonged or repeated exposure by inhalation.
Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS

Prevention

Wear respiratory protection.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well ventilated area.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.
Obtain special instructions before use.
In case of inadequate ventilation wear respiratory protection.
Contaminated clothing should not be allowed out of the workplace.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.

Response

If skin irritation occurs, seek medical advice/attention.
If eye irritation persists, get medical advice/attention.

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Wear eye/face protection.
Get medical advice/attention if you feel unwell.
If exposed or concerned: Get medical attention advice.
If skin irritation or rash occurs, seek medical advice/attention.
IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Remove/Take off immediately all contaminated clothing
Wash/Decontaminate removed clothing before reuse.
IF ON SKIN: Gently wash with plenty of soap and water.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment: refer to Label or MSDS.
Keep container tightly closed.
Wash contaminated clothing before reuse.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Storage

Store locked up.

Disposal

Dispose of contents and container in accordance with relevant legislation.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
beryllium sulfate	13510-49-1	>98

Section 4 - FIRST AID MEASURES

SWALLOWED

For advice, contact a Poisons Information Centre or a doctor.
· IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
· For advice, contact a Poisons Information Centre or a doctor.
Where Medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:
· Induce vomiting with fingers down the back of the of the throat, ONLY IF CONSCIOUS.
· Lean patient forward or place on left side (head-down position if possible) to maintain open airway and prevent aspiration.
NOTE: Wear a protective glove when inducing vomiting by mechanical means.
· In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.
· If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the MSDS should be provided. Further action will be the responsibility of the medical specialist.
· If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the MSDS.

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EYE

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.
· If pain persists or recurs seek medical attention.
· Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

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.

INHALED

· 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.

NOTES TO PHYSICIAN

Acute berylliosis produces interstitial fibrotic disease rather than the simple focal nodular lesions seen in simple pneumoconiosis. Fibrotic lesions appear out of proportion to dust-laden macrophages. In common with asbestosis and aluminosis the condition is characterised by reduced lung volumes, elasticity and diffusion. Chronic exposure causes chronic granulomatous disease similar to sarcoidosis and miliary tuberculosis. Multi -system involvement includes lymph nodes, spleen, liver, myocardium, kidney and bones. Occasionally hypercalcaemia develops. Initially non-specific symptoms appear and are followed by dyspnoea and cough. Symptoms are progressive and steroids may help to blunt the course of the disease. ACTH and cortisone therapy have been encouraging. Aurin tricarboxylic acid effectively protects monkeys exposed to lethal quantities of beryllium - no data is available for humans to substantiate its safety or effectiveness.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

· There is no restriction on the type of extinguisher which may be used.

FIRE FIGHTING

· 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.
· Do not approach containers suspected to be hot.
· Cool fire exposed containers with water spray from a protected location.
· If safe to do so, remove containers from path of fire.
· Equipment should be thoroughly decontaminated after use.

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FIRE/EXPLOSION HAZARD
Pollutant.
Non combustible.
Not considered to be a significant fire risk.
Heating may cause expansion or decomposition leading to violent rupture of containers.
Decomposes on heating and produces toxic fumes of sulfur oxides (SOx) and metal oxides.

Personal Protective Equipment
Breathing apparatus.
Gas tight chemical resistant suit.
Limit exposure duration to 1 BA set 30 mins.

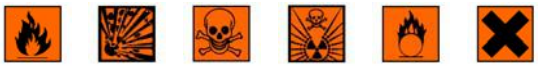
Section 6 - ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES

MINOR SPILLS
· Clean up all spills immediately.
· Avoid contact with skin and eyes.
· Wear protective clothing, gloves, safety glasses and dust respirator.
· Use dry clean up procedures and avoid generating dust.
· Sweep up or
· Vacuum up (consider explosion-proof machines designed to be grounded during storage and use).
· Place in clean drum then flush area with water.

MAJOR SPILLS
Environmental hazard - contain spillage.
· 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.
· Prevent, by any means available, spillage from entering drains or water course.
· Stop leak if safe to do so.
· Contain spill with sand, earth or vermiculite.
· Collect recoverable product into labelled containers for recycling.
· Neutralise/decontaminate residue.
· Collect solid residues and seal in labelled drums for disposal.
· Wash area and prevent runoff into drains.
· After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
· If contamination of drains or waterways occurs, advise emergency services.

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



X	X	+	X	X	+

+: May be stored together
O: May be stored together with specific preventions
X: Must not be stored together

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Section 6 - ACCIDENTAL RELEASE MEASURES

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

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

· Avoid all personal contact, including inhalation.
· Wear protective clothing when risk of exposure occurs.
· Use in a well-ventilated area.
· Prevent concentration in hollows and sumps.
· DO NOT enter confined spaces until atmosphere has been checked.
· DO NOT allow material to contact humans, exposed food or food utensils.
· Avoid contact with incompatible materials.
· When handling, DO NOT eat, drink or smoke.
· Keep containers securely sealed when not in use.
· Avoid physical damage to containers.
· Always wash hands with soap and water after handling.
· Work clothes should be laundered separately. Launder contaminated clothing before re -use.
· Use good occupational work practice.
· Observe manufacturer's storing and handling recommendations.
· Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

SUITABLE CONTAINER

Glass container.
Plastic container.
· Metal can or drum
· Packaging as recommended by manufacturer.
· Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid storage with strong alkalis.

STORAGE REQUIREMENTS

· Store in original containers.
· Keep containers securely sealed.
· Store in a cool, dry, well-ventilated area.
· Store away from incompatible materials and foodstuff containers.
· Protect containers against physical damage and check regularly for leaks.
· Observe manufacturer's storing and handling recommendations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

The following materials had no OELs on our records
• beryllium sulfate: CAS:13510- 49- 1 CAS:7787- 56- 6 CAS:25749- 12- 6 CAS:14214- 99- 4 CAS:14215- 00- 0

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EMERGENCY EXPOSURE LIMITS

Material	Revised IDLH Value (mg/m3)	Revised IDLH Value (ppm)
beryllium sulfate	4	

MATERIAL DATA

Because of the serious consequences of beryllium disease and because of the finding of tumours in animals exposed to beryllium and its compounds the recommended TLV-TWA has a very low value. OSHA in contrast treats these values as acceptable ceilings and states that the issues are too complex for rulemaking on permissible exposure limits.
TRK: 0.005 mg/m3 (for grinding of beryllium metals and alloys)
: 0.002 mg/m3 (others)
measured as inhalable fraction of the aerosol
The technical exposure limit, TRK (Technische Richtkonzentrationen), defines the airborne concentration of named carcinogenic materials which is the minimum possible given the state of current technologies. TRK values are assigned only for materials for which there is no current MAK (German exposure standard). Observance of the TRK value is intended to reduce the risk of adverse effects on health but does NOT completely eliminate it. Since no threshold doses can be determined for carcinogens, health considerations require that the exposure limits be kept as far as possible below the TRK and that the TRK value be gradually reduced. The limitation of exposure peaks is regulated as follows;
Short-term exposure limit: 5 x TRK
Short-term exposure duration: 15 min/average
Frequency per work shift: 5 times
Interval: 1 hour.
Report No. 35 1999, Deutsche Forschungsgemeinschaft.

PERSONAL PROTECTION




EYE

· 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 lens 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].

HANDS/FEET

Wear chemical protective gloves, eg. PVC.
Wear safety footwear.

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OTHER
· Overalls.
· PVC Apron.
· PVC protective suit may be required if exposure severe.
· Eyewash unit.
· Ensure there is ready access to a safety shower.

RESPIRATOR

Protection Factor	Half- Face Respirator	Full- Face Respirator	Powered Air Respirator
10 x ES	P1 Air- line*	- -	PAPR- P1 -
50 x ES	Air- line**	P2	PAPR- P2
100 x ES	-	P3	-
		Air- line*	-
100+ x ES	-	Air- line**	PAPR- P3

* - Negative pressure demand ** - Continuous flow.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.
For further information consult
your
Occupational Health and Safety Advisor.

ENGINEERING CONTROLS

Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection.
An approved self contained breathing apparatus (SCBA) may be required in some situations.
Provide adequate ventilation in warehouse or closed storage area. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

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 acid fumes, pickling (released at low velocity into zone of active generation)	0.5- 1 m/s (100- 200 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 air motion).	2.5- 10 m/s (500- 2000 f/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	1: Disturbing room air currents

continued...

capture

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 extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Odourless, colourless crystals. Soluble in water, insoluble in alcohol.
The tetrahydrate loses 2H2O at 100 C and becomes anhydrous at 250 C.

PHYSICAL PROPERTIES

Solid.
Mixes with water.

Molecular Weight: 177.15 (.4H2O)	Boiling Range (°C): Not available.
Melting Range (°C): 540 (decomposes)	Specific Gravity (water=1): 1.71 (.4H2O)
Solubility in water (g/L): Miscible	pH (as supplied): Not applicable
pH (1% solution): Not available.	Vapour Pressure (kPa): Not applicable
Volatile Component (%vol): Not applicable	Evaporation Rate: Not applicable
Relative Vapour Density (air=1): Not applicable	Flash Point (°C): Not applicable
Lower Explosive Limit (%): Not applicable	Upper Explosive Limit (%): Not applicable
Autoignition Temp (°C): Not applicable	Decomposition Temp (°C): Not available
State: Divided solid	

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

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Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED
Toxic effects may result from the accidental ingestion of the material; animal experiments indicate that ingestion of less than 40 gram may be fatal or may produce serious damage to the health of the individual.
Sulfate salts are poorly absorbed from the gastro-intestinal tract but because of osmotic activity are able to draw water from the lumen to produce diarrhoea (purging). Sulfate ion usually has little toxicological potential.
Beryllium even in its most highly soluble forms is poorly absorbed from the gastrointestinal tract.

EYE
Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.
Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.
The dust may produce eye discomfort causing transient smarting, blinking.

SKIN
Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.
Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.
Open cuts, abraded or irritated skin should not be exposed to this material.
Beryllium is a cutaneous sensitiser and primary skin irritant that produces contact dermatitis, skin granulomas and ulcers. An affinity for proteins found in the skin may explain the allergic sensitisation produced in guinea pig epidermis. The onset and pattern of the sensitisation suggests that tissue reactions induced by beryllium compounds should be considered immunologic reactions of the delayed or tuberculin type.
Beryllium dermatitis in humans consists of erythematous, papular or papulo-vesicular lesions usually confined to the exposed parts of the body. Conjunctivitis and upper respiratory tract involvement usually appear at the same time. The dermatitis appears 1 to 2 weeks after exposure to soluble salts. From patch tests a latent period of 12 to 13 days occurs before a dermal response, this being the time necessary for the development of a hypersensitive state. Beryllium ulcer is a localised phenomenon resulting from the

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embedding of a particle of beryllium salt into an abrasion or crack in the skin. The ulcerated lesions may last for months unless excised.

INHALED
Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system in a substantial number of individuals following inhalation.
Beryllium absorption from the lungs into the blood takes place more readily than by ingestion but is by no means rapid. A significant part of the dose is transported to the skeletal system. Of the remainder, ionic forms (for the greater part) go to the kidney (and are excreted in the urine) whereas colloidal forms collect in the liver.
Acute pneumonitis can occur from a single high level exposure to soluble beryllium compounds and beryllium exposures in excess of 1 mg/m3 consistently produce cases amongst all workers. Symptoms from a frank exposure may appear in a few hours and recovery may take up to 12 weeks. Typical symptoms appear as anorexia, weight loss, weakness and varying degrees of cyanosis. Physical signs include lowered vital capacity, fine to coarse sibilant rales and rapid pulse.
Early pulmonary changes in guinea pigs receiving intratracheal beryllium oxide are similar to a characteristic delayed hypersensitivity.

CHRONIC HEALTH EFFECTS
Limited evidence shows that inhalation of the material is capable of inducing a sensitisation reaction in a significant number of individuals at a greater frequency than would be expected from the response of a normal population.
Pulmonary sensitisation, resulting in hyperactive airway dysfunction and pulmonary allergy may be accompanied by fatigue, malaise and aching. Significant symptoms of exposure may persist for extended periods, even after exposure ceases. Symptoms can be activated by a variety of nonspecific environmental stimuli such as automobile exhaust, perfumes and passive smoking.
Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals.
Principal routes of exposure are by accidental skin and eye contact and inhalation of generated dusts.
Chronic exposure to beryllium dusts and fumes may cause berylliosis (progressive lung damage) and systemic beryllium disease, including pneumonitis, joint pain, skin lesions, chills and fever and damage to liver, kidney, spleen, lymph nodes and heart. The onset may be marked by weakness, easy fatigue and weight loss without cough or dyspnoea. Kidney stones can occur following high or repeated exposures. Chronic beryllium disease may appear months or years after all exposure to beryllium has ceased. Granulation tissue in the lung may appear in 3-months to 15 years, often after short exposure to low concentrations. Unless treated the condition is often fatal. Granulomatous lesions may also develop in the abdominal lymph nodes, spleen, liver and bone marrow. The biological half-life of beryllium is greater than 36 months with the material being detected more than 20-years after the last exposure. A significant risk of chronic beryllium disease exists among workers who smelt, burn, refine, or weld the metal or its alloys, even if exposures are below the adopted respiratory standards. Disease may result from occupational exposures to alloys containing less than 2% beryllium. The disease proves to be of long duration with exacerbation and/or remission in most cases. When chills and fever develop as complications the prognosis is bad. Some 60 individuals are known to have become ill by incidental exposure to beryllium. This exposure may have arisen as a result of living near a beryllium-producing facility (within 1 km) and/or by contact with contaminated clothing brought home by workers. There is some evidence that beryllium causes lung and bone cancer in humans a result confirmed in animal experiments.

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TOXICITY AND IRRITATION

TOXICITY	IRRITATION
for tetrahydrate:	
Oral (rat) LD50: 82 mg/kg	Nil Reported
Intravenous (rat) LD50: 3.85 mg/kg	
Intravenous (mouse) LD50: 4.97 mg/kg	
Inhalation (rat) LCLo: 10 mg/m^3	

Respiratory tract tumours recorded.
WARNING: This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS.

Section 12 - ECOLOGICAL INFORMATION

No data for beryllium sulfate.

Section 13 - DISPOSAL CONSIDERATIONS

- 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 - TRANSPORTATION INFORMATION

Labels Required: TOXIC
HAZCHEM: 2X

UNDG:

Dangerous Goods Class:	6.1	Subrisk:	None
UN Number:	1566	Packing Group:	II

Shipping Name:BERYLLIUM COMPOUND, N.O.S.
(contains beryllium sulfate)

Air Transport IATA:

ICAO/IATA Class:	6.1	ICAO/IATA Subrisk:	None
UN/ID Number:	1566	Packing Group:	II
ERG Code:	6L		

Shipping name:BERYLLIUM COMPOUND, N.O.S.
(contains beryllium sulfate)

Maritime Transport IMDG:

IMDG Class:	6.1	IMDG Subrisk:	None
UN Number:	1566	Packing Group:	II
EMS Number:	F- A, S- A		

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Section 14 - TRANSPORTATION INFORMATION

Shipping name:BERYLLIUM COMPOUND, N.O.S.
(contains beryllium sulfate)

Section 15 - REGULATORY INFORMATION

REGULATIONS

beryllium sulfate (CAS: 13510-49-1) is found on the following regulatory lists;
United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II

beryllium sulfate (CAS: 7787-56-6) is found on the following regulatory lists;
United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II

No data available for beryllium sulfate as CAS: 25749-12-6, CAS: 14214-99-4, CAS: 14215-00-0.

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
beryllium sulfate	13510- 49- 1, 7787- 56- 6, 25749- 12- 6, 14214- 99- 4, 14215- 00- 0

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

Issue Date: 12-May-2018