

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 1 of 15

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

BENZYL ALCOHOL

OTHER NAMES

C7-H8-O, hydroxytoluene, "alpha hydroxytoluene", "benzene carbinol", "phenyl carbinol", "benzene methanol", "phenyl methanol", "phenyl methyl alcohol"

PRODUCT USE

Solvent for gelatin, casein, cellulose acetate and shellac; manufacture of other benzyl compounds; in perfumery and flavouring in form of its aliphatic esters.

In pharmacy as a weak local anaesthetic and a mild antiseptic; in medicine as preservative in intravenous saline.

SUPPLIER

Company: S D FINE- CHEM LIMITED

Address:

315- 317, T.V. INDUSTRIAL ESTATE,
248, WORLI,

MUMBAI- 400030.INDIA.

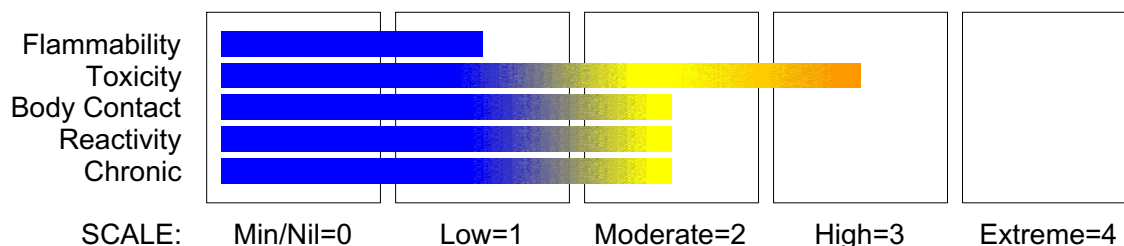
technical@sdfine.com

Telephone: 91- 22- 24959898

Telephone: 91- 22- 24959899

Fax: 91- 22- 24937232

HAZARD RATINGS



continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 2 of 15

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Acute Toxicity (Inhalation) Category 4
Acute Toxicity (Oral) Category 3
Chronic Aquatic Hazard Category 3
Eye Irritation Category 2A
Respiratory Irritation Category 3
Skin Corrosion/Irritation Category 3
Skin Sensitizer Category 1



EMERGENCY OVERVIEW

HAZARD

DANGER

Determined by using GHS criteria:

H335 H301 H332 H316 H319 H317 H412

May cause respiratory irritation

Toxic if swallowed

Harmful if inhaled

Causes mild skin irritation

Causes serious eye irritation

May cause allergic skin reaction

Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS

Prevention

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well ventilated area.

Contaminated clothing should not be allowed out of the workplace.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Response

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

Wash contaminated clothing before reuse.

If skin irritation or rash occurs, seek medical advice/attention.

If eye irritation persists, get medical advice/attention.

Wear eye/face protection.

If skin irritation occurs, seek medical advice/attention.

IF ON SKIN: Gently wash with plenty of soap and water.

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 3 of 15

Section 2 - HAZARDS IDENTIFICATION

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment: refer to Label or MSDS.

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	%
benzyl alcohol	100-51-6	> 99
impurities as benzaldehyde	100-52-7	0.3 appr.
dibenzyl ether	103-50-4	0.1 appr.

Section 4 - FIRST AID MEASURES

SWALLOWED

- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
 - For advice, contact a Poisons Information Centre or a doctor.
 - Urgent hospital treatment is likely to be needed.
 - 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.
 - 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 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.

EYE

- If this product comes in contact with the eyes:
- Immediately hold eyelids apart and flush the eye continuously with 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.
 - Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
 - Transport to hospital or doctor without delay.
 - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 4 of 15

Section 4 - FIRST AID MEASURES

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, without delay.

NOTES TO PHYSICIAN

Clinical experience of benzyl alcohol poisoning is generally confined to premature neonates in receipt of preserved intravenous salines.

- Metabolic acidosis, bradycardia, skin breakdown, hypotonia, hepatorenal failure, hypotension and cardiovascular collapse are characteristic.
- High urine benzoate and hippuric acid as well as elevated serum benzoic acid levels are found.
- The so-called "gasping syndrome" describes the progressive neurological deterioration of poisoned neonates.
- Management is essentially supportive.

Section 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

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.

FIRE/EXPLOSION HAZARD

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).
- May emit acrid smoke.
- Mists containing combustible materials may be explosive.

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 5 of 15

Section 5 - FIRE FIGHTING MEASURES

Combustion products include: carbon dioxide (CO₂), aldehydes, other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

WARNING: Long standing in contact with air and light may result in the formation of potentially explosive peroxides.

FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

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

Slippery when spilt.

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labelled container for waste disposal.

MAJOR SPILLS

Slippery when spilt.

- 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.

EMERGENCY RESPONSE PLANNING GUIDELINES (ERPG)

The maximum airborne concentration below which it is believed that nearly all individuals could be exposed for up to one hour WITHOUT experiencing or developing

life-threatening health effects is:
benzyl alcohol 200 ppm

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 6 of 15

Section 6 - ACCIDENTAL RELEASE MEASURES

irreversible or other serious effects or symptoms which could impair an individual's ability to take protective action is:
benzyl alcohol 100 ppm

other than mild, transient adverse effects without perceiving a clearly defined odour is:
benzyl alcohol 12.5 ppm

The threshold concentration below which most people will experience no appreciable risk of health effects:
benzyl alcohol 4 ppm

American Industrial Hygiene Association (AIHA)

Ingredients considered according to the following cutoffs

Very Toxic (T+)	$\geq 0.1\%$	Toxic (T)	$\geq 3.0\%$
R50	$\geq 0.25\%$	Corrosive (C)	$\geq 5.0\%$
R51	$\geq 2.5\%$		
else	$\geq 10\%$		

where percentage is percentage of ingredient found in the mixture

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+: May be stored together

O: May be stored together with specific preventions

X: Must not be stored together

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.

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 7 of 15

Section 7 - HANDLING AND STORAGE

DO NOT allow clothing wet with material to stay in contact with skin.

The substance accumulates peroxides which may become hazardous only if it evaporates or is distilled or otherwise treated to concentrate the peroxides. The substance may concentrate around the container opening for example.

Purchases of peroxidisable chemicals should be restricted to ensure that the chemical is used completely before it can become peroxidised.

- A responsible person should maintain an inventory of peroxidisable chemicals or annotate the general chemical inventory to indicate which chemicals are subject to peroxidation. An expiration date should be determined. The chemical should either be treated to remove peroxides or disposed of before this date.
- The person or laboratory receiving the chemical should record a receipt date on the bottle. The individual opening the container should add an opening date.
- Unopened containers received from the supplier should be safe to store for 18 months.
- Opened containers should not be stored for more than 12 months.

SUITABLE CONTAINER

- Lined metal can, lined metal pail/ can.
- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents.

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

- | | |
|-------------------|----------------|
| • benzaldehyde: | CAS:100- 52- 7 |
| • dibenzyl ether: | CAS:103- 50- 4 |

MATERIAL DATA

No exposure limits set by NOHSC or ACGIH.

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure.

Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

OEL STEL (Russia): 5 mg/m³ Skin

Odour Threshold: 5.5 ppm

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 8 of 15

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

INGREDIENT DATA

BENZALDEHYDE:

No exposure limits set by NOHSC or ACGIH.

CEL TWA: 2 ppm, 8.7 mg/m³; STEL 4 ppm, 17.4 mg/m³ (compare WEEL-TWA, STEL)

Odour Threshold Value; variously reported as 0.0060 ppm and 0.042 ppm.

Saturated vapor concentration at 26.2 C: 1300 ppm.

Benzaldehyde vapour is an irritant to the eyes and upper respiratory tract. A concentration of 2.1 ppm exhibits a strong penetrating odour. Human volunteers complained that 4.5 ppm was irritating to the eyes and upper respiratory tract. A work-place environmental exposure

limit (WEEL), proposed by AIHA is thought to be protective against such effects.

DIBENZYL ETHER:

No exposure limits set by NOHSC or ACGIH.

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 or safety gumboots, eg. Rubber.

NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

OTHER

- Overalls.
- Eyewash unit.
- Barrier cream.
- Skin cleansing cream.

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 9 of 15

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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: benzyl alcohol

Protective Material CPI *.

BUTYL	A
VITON	A

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 "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.

RESPIRATOR

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Breathing Zone Level ppm (volume)	Maximum Protection Factor	Half- face Respirator	Full- Face Respirator
1000	10	A- AUS	-
1000	50	-	A- AUS
5000	50	Airline *	-
5000	100	-	A- 2
10000	100	-	A- 3
	100+		Airline**

* - Continuous Flow

** - Continuous-flow or positive pressure demand.

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.

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 10 of 15

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Type of Contaminant: solvent, vapours, degreasing etc., evaporating from tank (in still air). 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) direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	Air Speed: 0.25- 0.5 m/s (50- 100 f/min.) 0.5- 1 m/s (100- 200 f/min.) 1- 2.5 m/s (200- 500 f/min.) 2.5- 10 m/s (500- 2000 f/min.)
---	--

Within each range the appropriate value depends on:

Lower end of the range 1: Room air currents minimal or favourable to capture 2: Contaminants of low toxicity or of nuisance value only. 3: Intermittent, low production. 4: Large hood or large air mass in motion	Upper end of the range 1: Disturbing room air currents 2: Contaminants of high toxicity 3: High production, heavy use 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

Clear, colourless, combustible liquid with a mild aromatic odour; partly soluble in water. Sharp burning taste.
Available in purity grades of: B.P., Photographic, Technical and Textile.

PHYSICAL PROPERTIES

Liquid.
Does not mix with water.
Sinks in water.
Toxic or noxious vapours/gas.

Molecular Weight: 108.14 Pure
Melting Range (°C): - 15.3

Boiling Range (°C): 203- 209
Specific Gravity (water=1): 1.04 @ 20 C

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 11 of 15

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Solubility in water (g/L): Partly miscible
pH (1% solution): Not applicable.
Volatile Component (%vol): 100
Relative Vapour Density (air=1): 3.72
Lower Explosive Limit (%): 1.3
Autoignition Temp (°C): 428- 435
State: Liquid

pH (as supplied): Not applicable
Vapour Pressure (kPa): 0.005 @ 20 C
Evaporation Rate: Negligible
Flash Point (°C): 101 (CC)
Upper Explosive Limit (%): 13.0
Decomposition Temp (°C): Not available.
Viscosity: Not Available

log Kow: 1.1
log Kow (Sangster 1997): 1.48
log Kow : 1.48

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

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

Section 11 - TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

EYE

Evidence exists, or practical experience predicts, that the material may cause severe 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. Eye contact may cause significant inflammation with pain. Corneal injury may occur; permanent impairment of vision may result unless treatment is prompt and adequate. Repeated or prolonged exposure to irritants may cause inflammation characterised by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur.

SKIN

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

Skin contact with the material may be harmful; systemic effects may result following absorption.

The material may produce moderate skin irritation; limited evidence or practical experience suggests, that the material either:

- produces moderate inflammation of the skin in a substantial number of individuals

continued...

BENZYL ALCOHOL

Section 11 - TOXICOLOGICAL INFORMATION

following direct contact and/or

- produces significant, but moderate, 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.

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.

The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling the epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

INHALED

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may produce toxic effects; these may be fatal.

Limited evidence or practical experience suggests that the material may produce irritation of the respiratory system, in a significant 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.

Acute effects from inhalation of high vapour concentrations may be chest and nasal irritation with coughing, sneezing, headache and even nausea.

CHRONIC HEALTH EFFECTS

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

There exists limited evidence that shows that skin contact with the material is capable either of inducing a sensitisation reaction in a significant number of individuals, and/or of producing positive response in experimental animals.

The material may accumulate in the human body and progressively cause tissue damage.

Animal studies have shown this compound to cause lung, liver, kidney and CNS disorders. Studies in animals have shown evidence of teratogenicity in the chick embryo. The significance of the information for humans is unknown.

Benzyl alcohol showed no evidence of carcinogenic activity in long-term toxicology and carcinogenesis study.

[Orica]

TOXICITY AND IRRITATION

TOXICITY

Oral (rat) LD50: 1230 mg/kg

Inhalation (rat) LCLo: 2000 ppm/4h

Inhalation (rat) LC50: 1000 ppm/8h

Inhalation (rat) LC50: >4178 mg/m³/4h

Dermal (rabbit) LD50: 2000 mg/kg

IRRITATION

Skin (man): 16 mg/48h- Mild

Skin (rabbit):10 mg/24h open- Mild

Eye (rabbit): 0.75 mg Open SEVERE

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 13 of 15

Section 11 - TOXICOLOGICAL INFORMATION

(aerosol)

BENZALDEHYDE:

TOXICITY

Oral (rat) LD50: 1300 mg/kg

Oral (mouse) LD50: 28 mg/kg

Intraperitoneal (mouse) LD50: 9 mg/kg

Subcutaneous (rabbit) LD50: 5000 mg/kg

Oral (g.pig) LD50: 1000 mg/kg

Somnolence, tremor, coma, ulceration of the small intestine, increased urine volume recorded.

IRRITATION

Skin (rabbit): 500 mg/24h - Moderate

DIBENZYL ETHER:

TOXICITY

Oral (rat) LD50: 2500 mg/kg

IRRITATION

Skin (rabbit): 500 mg/24h - Mild

Eye (rabbit): 500 mg/24h - Mild

Section 12 - ECOLOGICAL INFORMATION

Marine Pollutant: Not Determined

DO NOT discharge into sewer or waterways.

log Kow: 1.1

Koc: <5

Henry's atm m³/mol: 3.91E-07

BOD 5 if unstated: 1.55-1.6, 33-62%

COD: 96%

ThOD: 2.519

BCF: 4

Toxicity Fish: LC50(96) 10-460 mg/L

Toxicity invertebrate: cell mult. inhib. 350 mg/L

Bioaccumulation: not sig

Anaerobic effects: sig degrad

Effects on algae and plankton: inhib degrad. of glucose

Degradation Biological: sig

processes Abiotic: RxnOH*, no photochem

Refer to data for ingredients, which follows:

BENZALDEHYDE:

log Kow (Sangster 1997): 1.48

log Pow (Verschueren 1983): 1.48

BOD5: 50%

log Kow : 1.48

BOD 5 if unstated: 1.62, 36%

COD: 1.98, 94%

ThOD: 2.42

Toxicity Fish: LC50(96) 1.1-11 mg/L

Toxicity invertebrate: cell mult. inhib. 0.29-132 mg/L

Effects on algae and plankton: cell mult. inhib. 20 mg/L

continued...

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 14 of 15

Section 13 - DISPOSAL CONSIDERATIONS

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.
- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

Section 14 - TRANSPORTATION INFORMATION

HAZCHEM:

☐ None

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: UN, IATA, IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

benzyl alcohol (CAS: 100-51-6) is found on the following regulatory lists;
IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk
International Council of Chemical Associations (ICCA) - High Production Volume List
OECD Representative List of High Production Volume (HPV) Chemicals

No data available for benzyl alcohol as CAS: 1336-27-2, CAS: 185532-71-2.

continued....

BENZYL ALCOHOL

GHS Safety Data Sheet

Version No:2.0

Page 15 of 15

Section 16 - OTHER INFORMATION

INGREDIENTS WITH MULTIPLE CAS NUMBERS

Ingredient Name	CAS
benzyl alcohol	100- 51- 6, 1336- 27- 2, 185532 - 71- 2

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: 26-Mar-2018