

ICP Construction

Version No: 1.2 Issue Date: 06/03/2017 Safety Data Sheet according to OSHA HazCom Standard (2012) requirements Print Date: 06/03/2017

SECTION 1 IDENTIFICATION

Product Identifier

| Product name | Crack Filler Red 5060 |
|----------------------------------|-----------------------|
| Synonyms | Not Available |
| Other means of identification | Not Available |

Recommended use of the chemical and restrictions on use

| Relevant identified uses | Repairing cracks in athletic surfaces |
|--------------------------|---------------------------------------|
|--------------------------|---------------------------------------|

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

| ICP Construction |
|---|
| 150 Dascomb Road MA 01810 United States |
| 923-623-9980 |
| Not Available |
| https://www.icp-construction.com/ |
| Not Available |
| |

Emergency phone number

| Association / Organisation | Chemtel |
|-----------------------------------|----------------|
| Emergency telephone numbers | 1-800-255-3924 |
| Other emergency telephone numbers | 1-813-248-0585 |

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

| Classification | Skin Sensitizer Category 1, Eye Irritation Category 2A, Carcinogenicity Category 2, Specific target organ toxicity - repeated exposure Category 2 | |
|----------------|---|--|
| | | |

Label elements



Hazard statement(s)

| H317 | May cause an allergic skin reaction. | |
|------|--|--|
| H319 | Causes serious eye irritation. | |
| H351 | Suspected of causing cancer. | |
| H373 | May cause damage to organs through prolonged or repeated exposure. | |

Hazard(s) not otherwise specified

Not Applicable

Precautionary statement(s) Prevention

P201 Obtain special instructions before use.

S.GHS.USA.EN

| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
|--|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| Precautionary statement(s |) Response |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P363 | Wash contaminated clothing before reuse. |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water. |
| | |
| Precautionary statement(s |) Storage |
| Precautionary statement(s P405 | Storage Store locked up. |
| Precautionary statement(s P405 Precautionary statement(s | Store locked up. |

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|------------|-----------|---------------------------------|
| 119-61-9 | <1 | benzophenone |
| 1309-37-1 | <1 | ferric oxide |
| 111-76-2 | <1 | ethylene glycol monobutyl ether |
| 14808-60-7 | 50-80 | silica crystalline - quartz |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

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 | 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. |
| Ingestion | Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIRE-FIGHTING 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.

Special protective equipment and precautions for fire-fighters

| Fire Fighting | When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles. When heated to extreme temperatures, (>1700 deg.C) amorphous silica can fuse. |
|---------------|---|
|---------------|---|

| | Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. 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 | Non combustible. Not considered a significant fire risk, however containers may burn. silicon dioxide (SiO2) May emit corrosive fumes. |

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 | Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, 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 | 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 all means available, spillage from entering drains or water courses. Consider evacuation (or protect in place). No smoking, naked lights or ignition sources. Increase ventilation. Stop leak if safe to do so. Water spray or fog may be used to disperse / absorb vapour. Contain or absorb spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. 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. |

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

| Safe handling | Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Avoid contact with moisture. 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 scap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS. Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. DO NOT allow clothing wet with material to stay in contact with skin |
|-------------------|--|
| Other information | Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained. DO NOT allow clothing wet with material to stay in contact with skin |

Conditions for safe storage, including any incompatibilities

| Suitable container | Polyethylene or polypropylene container. Packing as recommended by manufacturer. Check all containers are clearly labelled and free from leaks. |
|-------------------------|--|
| Storage incompatibility | Silicas: react with hydrofluoric acid to produce silicon tetrafluoride gas react with xenon hexafluoride to produce explosive xenon trioxide react scothermically with oxygen diffuoride, and explosively with chlorine trifluoride (these halogenated materials are not commonplace industrial materials) and other fluorine-containing compounds may react with fluorine, chlorates are incompatible with strong oxidisers, manganese trioxide, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid, vinyl acetate may react vigorously when heated with alkali carbonates. None known |

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|--|--|---|------------------|------------------|---|
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | ferric oxide | Iron oxide fume | 10 mg/m3 | Not Available | Not Available | See Appendix D |
| US NIOSH Recommended Exposure Limits (RELs) | ferric oxide | Iron(III)oxide, Iron oxide red, Red iron oxide, Red oxide | 5 mg/m3 | Not Available | Not Available | TLV® Basis: Pneumoconiosis |
| US NIOSH Recommended Exposure Limits (RELs) | ferric oxide | Ferric oxide, Iron(III) oxide | 5 mg/m3 | Not Available | Not Available | Not Available |
| US ACGIH Threshold Limit Values (TLV) | ferric oxide | Iron oxide (Fe203) | Not Available | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | ethylene glycol monobutyl ether | 2-Butoxyethanol | 240 mg/m3 / 50 ppm | Not Available | Not Available | [skin] |
| US NIOSH Recommended Exposure Limits (RELs) | ethylene glycol monobutyl ether | Butyl Cellosolve®, Butyl oxitol, Dowanol® EB, EGBE, Ektasolve EB®, Ethylene glycol monobutyl ether, Jeffersol EB | 24 mg/m3 / 5 ppm | Not Available | Not Available | TLV® Basis: Eye & URT irr; BEI |
| US ACGIH Threshold Limit Values (TLV) | ethylene glycol monobutyl ether | 2-Butoxyethanol | 20 ppm | Not Available | Not Available | Not Available |
| US OSHA Permissible Exposure Levels (PELs) - Table Z1 | silica crystalline - quartz | Silica, crystalline quartz, respirable dust | 10/(% SiO2+ 2) mg/m3 / 250/(%SiO2+5) mppcf | Not Available | Not Available | See Table Z-3 |
| US OSHA Permissible Exposure Levels (PELs) - Table Z3 | silica crystalline - quartz | Silica: Crystalline Quartz | 30/(% SiO2+ 2) mg/m3 | Not Available | Not Available | (Respirable);(TWA mppcf (The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable)); (TWA mg/m3 (e)) |
| US OSHA Permissible Exposure Levels (PELs) - Table Z3 | silica crystalline - quartz | Silica: Crystalline Quartz | 0.05 mg/m3 | Not Available | Not Available | (Total Dust) |
| US NIOSH Recommended Exposure Limits (RELs) | silica crystalline - quartz | Cristobalite, Quartz, Tridymite, Tripoli | Not Available | Not Available | Not Available | Ca See Appendix A |

EMERGENCY LIMITS

| Ingredient | Material name | TEEL-1 | | TEEL-2 | TEEL-3 |
|---------------------------------|---|-----------|------------|-----------|-------------|
| benzophenone | Benzophenone | 1.5 mg/m3 | | 90 mg/m3 | 310 mg/m3 |
| ferric oxide | Iron oxide; (Ferric oxide) | 15 mg/m3 | | 360 mg/m3 | 2,200 mg/m3 |
| ethylene glycol monobutyl ether | Butoxyethanol, 2-; (Glycol ether EB) | 60 ppm | | 120 ppm | 700 ppm |
| silica crystalline - quartz | Silica, crystalline-quartz; (Silicon dioxide) | 0.075 mg/ | m3 | 33 mg/m3 | 200 mg/m3 |
| | | | | | |
| Ingredient | Original IDLH | | Revised | IDLH | |
| benzophenone | Not Available | | Not Availa | able | |
| ferric oxide | N.E. mg/m3 / N.E. ppm | | 2,500 mg | ′m3 | |
| ethylene glycol monobutyl ether | 700 ppm | | 700 [Uncł | ı] ppm | |
| silica crystalline - quartz | N.E. mg/m3 / N.E. ppm | | 50 mg/m3 | 6 | |

Exposure controls

| Appropriate 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 property. The design of a ventilation system must match the particular process and chemical or contraminant in use. Employees exposed to confirmed human carcinogens should be authorized to do so by the employer, and work in a regulated area. Work should be undertaken in an isolated system such as a "glove-box". Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system. Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within. • Open-vessel systems are prohibited. | |
|---|--|
| | 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 property. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employees exposed to confirmed human carcinogens should be authorized to do so by the employer, and work in a regulated area. Work should be undertaken in an isolated system such as a "glove-box". Employees should wash their hands and arms upon completion of the assigned task and before engaging in other activities not associated with the isolated system. Within regulated areas, the carcinogen should be stored in sealed containers, or enclosed in a closed system, including piping systems, with any sample ports or openings closed while the carcinogens are contained within. |

Thermal hazards Not Available

| | Each operation should be provided with continuous local exhaust ventilation so that air movement is always from ordinary work areas to the operation. Exhaust air should not be discharged to regulated areas, non-regulated areas or the external environment unless decontaminated. Clean make-up air should be introduced in sufficient volume to maintain correct operation of the local exhaust system. For maintenance and decontamination activities, authorized employees entering the area should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood. Except for outdoor systems, regulated areas should be maintained under negative pressure (with respect to non-regulated areas). Local exhaust ventilation requires make-up air be supplied in equal volumes to replaced air. Laboratory hoods must be designed and maintained so as to draw air inward at an average linear face velocity of 0.76 m/sec with a minimum of 0.64 m/sec. Design and construction of the fume hood requires that insertion of any portion of the employees body, other than hands and arms, be disallowed. |
|-------------------------|---|
| Personal protection | |
| 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. 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] |
| Skin protection | See Hand protection below |
| Hands/feet protection | Wear chemical protective gloves, e.g. PVC. Wear adapt of protective gloves, e.g. 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. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. 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 hereak 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 moisturizer is recommended. Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: frequency and duration of contact, deventival Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended. Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use. Contaminational equivalent) is recommended. |
| Body protection | See Other protection below |
| Other protection | Employees working with confirmed human carcinogens should be provided with, and be required to wear, clean, full body protective clothing (smocks, coveralls, or long-sleeved shirt and pants), shoe covers and gloves prior to entering the regulated area. [AS/NZS ISO 6529:2006 or national equivalent] Employees engaged in handling operations involving carcinogens should be provided with, and required to wear and use half-face filter-type respirators with filters for dusts, mists and fumes, or air purifying canisters or cartridges. A respirator affording higher levels of protection may be substituted. [AS/NZS 171: or national equivalent] Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely. Prior to each exit from an area containing confirmed human carcinogens, employees should be required to remove and leave protective clothing and equipment at the point of exit and at the last exit of the day, to place used clothing and equipment in impervious containers at the point of exit for purposes of decontamination or disposal. The contents of such impervious containers must be identified with suitable labels. For maintenance and decontamination activities, authorized employees should be provided with and required to wear clean, impervious garments, including gloves, boots and continuous-air supplied hood. Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood. Overalls. Pr.V.C. apron. Barrier cream. Skin cleansing cream. Extrema for and the leans to the day to be accessed and the leans and hood. Evervals. |
| | |

Respiratory protection

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

If inhalation risk above the TLV exists, wear approved dust respirator.

Use respirators with protection factors appropriate for the exposure level.

- + Up to 5 X TLV, use valveless mask type; up to 10 X TLV, use 1/2 mask dust respirator
- Up to 50 X TLV, use full face dust respirator or demand type C air supplied respirator
- + Up to 500 X TLV, use powered air-purifying dust respirator or a Type C pressure demand supplied-air respirator
- Over 500 X TLV wear full-face self-contained breathing apparatus with positive pressure mode or a combination respirator with a Type C positive pressure supplied-air full-face respirator and an auxiliary self-contained breathing apparatus operated in pressure demand or other positive pressure mode

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Text | | |
|---|---------------|--|---------------|
| Dissol at the | | Deletive density (Motor 4) | |
| Physical state | Liquid | 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 Available |
| 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) | Not Available | Molecular weight (g/mol) | Not Available |
| Flash point (°C) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Available | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available |
| Solubility in water (g/L) | Immiscible | 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 | Unstable in the presence of incompatible materials. Product is considered stable. 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

Information on toxicological effects

| Inhaled | There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs. The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. |
|--------------|--|
| Ingestion | 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 | 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. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. |
| Eye | This material can cause eye irritation and damage in some persons. |
| Chronic | Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. There is sufficient evidence to suggest that this material directly causes cancer in humans. Toxic: danger of serious damage to health by prolonged exposure through inhalation. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Crystalline silicas activate the inflammatory response of white blood cells after they injure the lung epithelium. Chronic exposure to crystalline silicas reduces lung capacity and predisposes to chest infections. |

| | 1 | | | |
|--|---|--------------------------------|--|--|
| Crack Filler Red 5060 | TOXICITY | IRRITATION | | |
| | Not Available | Not Available | | |
| | | | | |
| | TOXICITY | | IRRITATION | |
| benzophenone | Dermal (rabbit) LD50: 3535 mg/kg ^[2] | | Not Available | |
| | Oral (rat) LD50: >10,000 mg/kgd ^[2] | | | |
| | | | | |
| ferric oxide | | | IRRITATION Not Available | |
| | Oral (rat) LD50: >5000 mg/kg ^[1] | | NOT AVAIIADIE | |
| | тохісіту | IRRITATION | | |
| | dermal (rat) LD50: >2000 mg/kg ^[1] | Eye (rabbit): 100 mg SEVE | RE | |
| ethylene glycol monobutyl ether | Inhalation (rat) LC50: 450 ppm/4hr ^[2] | Eye (rabbit): 100 mg/24h-m | | |
| | Oral (rat) LD50: 250 mg/kg ^[2] | Skin (rabbit): 500 mg, open | ; mild | |
| | | | | |
| | TOXICITY | IRRITATION | | |
| silica crystalline - quartz | Not Available | 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 | | | |
| | | | | |
| | The following information refers to contact allergens as a group and may not be | | | |
| | Contact allergies quickly manifest themselves as contact eczema, more rarely a a cell-mediated (T lymphocytes) immune reaction of the delayed type. | s urticaria or Quincke's oedem | a. The pathogenesis of contact eczema involves | |
| BENZOPHENONE | WARNING: This substance has been classified by the IARC as Group 2B: Pos | ssibly Carcinogenic to Humans | 5. | |
| | This is a member or analogue of a group of aromatic substituted secondary alcohols, ketones and related esters generally regarded as safe (GRAS), based partly on the fact that in humans and other animals, they are rapidly absorbed, broken down and excreted, with a wide safety margin. They also lack significant | | | |
| | parity on the fact that in numaris and other animals, they are rapidly absorbed, proken down and excreted, with a wide safety margin. They also lack significant potential to cause genetic toxicity and mutations. Animal testing on 17 of 38 agents in this group revealed that oral acute toxicity is extremely low. | | | |
| | The material may produce severe irritation to the eye causing pronounced inflarr conjunctivitis. | mation. Repeated or prolonge | d exposure to irritants may produce | |
| | The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicle scaling and thickening of the skin. For ethylene glycol monoalkyl ethers and their acetates (EGMAEs): | | | |
| | | | | |
| | Typical members of this category are ethylene glycol propylene ether (EGPE), ethylene glycol butyl ether (EGBE) and ethylene glycol hexyl ether (EGHE) and their acetates. | | | |
| ETHYLENE GLYCOL MONOBUTYL ETHER | EGMAEs are substrates for alcohol dehydrogenase isozyme ADH-3, which catalyzes the conversion of their terminal alcohols to aldehydes (which are transient metabolites). Further, rapid conversion of the aldehydes by aldehyde dehydrogenase produces alkoxyacetic acids, which are the predominant urinary | | | |
| | metabolites of mono substituted glycol ethers. Animal testing showed that exposure to ethylene glycol monobutyl ether resulted in toxicity to both the mother and the embryo. Reproductive effects were thought | | | |
| to be less than that of other monoalkyl ethers of ethylene glycol. Chronic exposure may cause anaemia, with enlargement and fragility of red blood cells. | | | | |

| | Ethylene glycol is quickly and extensively absorbed throughout the gastrointestinal tract. Limited information suggests that it is also absorbed through the airways; absorption through skin is apparently slow. Following absorption, it is distributed throughout the body. NOTE: Changes in kidney, liver, spleen and lungs are observed in animals exposed to high concentrations of this substance by all routes. ** ASCC (NZ) SDS | | |
|-----------------------------------|--|---|--|
| SILICA CRYSTALLINE - QUARTZ | WARNING: For inhalation exposure <u>ONLY</u> : This substance has been classified by the IARC as Group 1: CARCINOGENIC TO HUMANS The International Agency for Research on Cancer (IARC) has classified occupational exposures to respirable (<5 um) crystalline silica as being carcinogenic to humans . This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of guartz and cristobalite. Crystalline silica is also known to cause silicosis, a non-cancerous lung disease. | | |
| BENZOPHENONE & FERRIC OXIDE | 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. | | |
| Acute Toxicity | S Carcinogenicity | ✓ | |
| Skin Irritation/Corrosion | O Reproductivity | 0 | |
| Serious Eye Damage/Irritation | ✓ STOT - Single Exposure | 0 | |
| Respiratory or Skin sensitisation | ✓ STOT - Repeated Exposure | * | |
| Mutagenicity | S Aspiration Hazard | 0 | |
| | | | |

Legend:

X − Data available but does not fill the criteria for classification
 ✓ − Data available to make classification

S – Data Not Available to make classification

For ethylene glycol:

| Toxi | city |
|------|------|
| TOXE | City |

| Crack Filler Red 5060 | ENDPOINT | | TEST DURATION (HR) | | SPECIES | VALUE | VALUE | | JRCE |
|-----------------------------|-------------------------------|---------|-------------------------------|-------------------------------|-------------------------------|--------------------|----------------------|------------|----------------|
| | Not Applicable Not Applicable | | Not Applicable | Not Applicable Not | | Not Applie | Not Applicable Not A | | Applicable |
| | ENDPOINT | TE | ST DURATION (HR) | SPE | CIES | | VALUE | | SOURCE |
| | LC50 | 96 | | Fish | | | 4.478mg | g/L | 3 |
| | EC50 | 48 | | Crustacea | | | 6.784mg/L | | 2 |
| benzophenone | EC50 | 96 | | Algae or other aquatic plants | | 8.687mç | g/L | 3 | |
| | EC50 | 24 | | Crus | stacea | | 0.28mg/ | Ĺ | 4 |
| | NOEC | 76 | 3 | Fish | I | | =0.54m | g/L | 1 |
| | | | | | | | | | |
| | ENDPOINT | TE | ST DURATION (HR) | SP | ECIES | | VALU | E | SOURCE |
| | LC50 | 96 | | Fis | Fish | | 0.05m | g/L | 2 |
| ferric oxide | EC50 | 72 | | Alg | Algae or other aquatic plants | | 18mg/ | ۲L | 2 |
| | EC50 | 504 | | Cru | Crustacea | | 4.49m | g/L | 2 |
| | NOEC | 504 | | Fish | | 0.52m | g/L | 2 | |
| | | | | | | | | | |
| | ENDPOINT | TE | ST DURATION (HR) | SPEC | IES | | VALUE | | SOURCE |
| | LC50 | 96 | | Fish | | 222.042mg/ | Ľ | 3 | |
| ylene glycol monobutyl | EC50 | 48 | | Crustacea | | >1000mg/L | | 4 | |
| ether | EC50 | 96 | | Algae or other aquatic plants | | 1081.644mg | g/L | 3 | |
| | EC50 | 384 | | Crustacea | | 51.539mg/L | | 3 | |
| | NOEC | 96 | | Crustacea | | 1000mg/L | | 4 | |
| | | | 1 | | | | | | |
| silica crystalline - quartz | | | TEST DURATION (HR) | | | | | | JRCE |
| | Not Applicable Not Applicable | | Not Applicable Not Applie | | licable Not Applicable | | | | |
| Legend: | Extracted from 1. I | UCLID T | oxicity Data 2. Europe ECHA I | Registered Sub | stances - Ecotoxicologi | ical Information - | Aquatic Toxic | ity 3. EPI | WIN Suite V3.1 |

Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---------------------------------|---------------------------|-----------------------------|
| benzophenone | HIGH | HIGH |
| ethylene glycol monobutyl ether | LOW (Half-life = 56 days) | LOW (Half-life = 1.37 days) |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---------------------------------|------------------|
| benzophenone | LOW (BCF = 9.2) |
| ethylene glycol monobutyl ether | LOW (BCF = 2.51) |

Mobility in soil

| • | |
|---------------------------------|------------------|
| Ingredient | Mobility |
| benzophenone | LOW (KOC = 1077) |
| ethylene glycol monobutyl ether | HIGH (KOC = 1) |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

| Product / Packaging disposal | 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 SDS and observe all notices pertaining to the product. 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. |
| Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. |
| 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 licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material). |
| E Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed. |

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant NO

Land transport (DOT): 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

SECTION 15 REGULATORY INFORMATION

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

BENZOPHENONE(119-61-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

| BENZOPHENONE(119-61-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS | |
|--|---|
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs | US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Ris Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for |
| US - California Proposition 65 - Carcinogens | Chemicals Causing Reproductive Toxicity |
| US AIHA Workplace Environmental Exposure Levels (WEELs) | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| FERRIC OXIDE(1309-37-1) IS FOUND ON THE FOLLOWING REGULATORY LISTS | |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants |
| Monographs | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant |
| US - Alaska Limits for Air Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| US - California Permissible Exposure Limits for Chemical Contaminants | Contaminants |
| US - Hawaii Air Contaminant Limits | US - Washington Permissible exposure limits of air contaminants |
| US - Idaho - Limits for Air Contaminants | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| US - Massachusetts - Right To Know Listed Chemicals | US ACGIH Threshold Limit Values (TLV) |
| US - Michigan Exposure Limits for Air Contaminants | US ACGIH Threshold Limit Values (TLV) - Carcinogens |
| US - Minnesota Permissible Exposure Limits (PELs) | US NIOSH Recommended Exposure Limits (RELs) |
| US - Mininesota remissible Exposure Elmits (r EES) | |
| , | US OSHA Permissible Exposure Levels (PELs) - Table Z1 |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List | US OSHA Permissible Exposure Levels (PELs) - Table 21 US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory |
| US - Oregon Permissible Exposure Limits (Z-1) | , |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS |
| US - Oregon Permissible Exposure Limits (2-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminan |
| US - Oregon Permissible Exposure Limits (2-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminan US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air |
| US - Oregon Permissible Exposure Limits (2-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminan US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants US - Massachusetts - Right To Know Listed Chemicals | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants US - Massachusetts - Right To Know Listed Chemicals US - Michigan Exposure Limits for Air Contaminants | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants US EPA Carcinogens Listing |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits US - Hawaii Air Contaminant Limits US - Massachusetts - Right To Know Listed Chemicals US - Michigan Exposure Limits for Air Contaminants US - Minnesota Permissible Exposure Limits (PELs) | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants US EPA Carcinogens Listing US EPCRA Section 313 Chemical List |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California Permissible Exposure Limits for Chemical Contaminants US - Hawaii Air Contaminant Limits US - Hawaii Air Contaminant Limits US - Massachusetts - Right To Know Listed Chemicals US - Michigan Exposure Limits for Air Contaminants US - Minnesota Permissible Exposure Limits (PELs) US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants US EPCRA Section 313 Chemical List US NIOSH Recommended Exposure Limits (RELs) |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (US - Hawaii Air Contaminant Limits US - Idano - Limits for Air Contaminants US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants US - Massachusetts - Right To Know Listed Chemicals US - Michigan Exposure Limits for Air Contaminants US - Minesota Permissible Exposure Limits (PELs) US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants US EPA Carcinogens Listing US EPCRA Section 313 Chemical List |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (US - Salifornia OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (US - Mawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants US - Hawaii Air Contaminant Limits US - Massachusetts - Right To Know Listed Chemicals US - Michigan Exposure Limits for Air Contaminants US - Minesota Permissible Exposure Limits (PELs) US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens US - Oregon Permissible Exposure Limits (Z-1) | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminar US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US ACGIH Threshold Limit Values (TLV) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants US EPCRA Section 313 Chemical List US NIOSH Recommended Exposure Limits (RELs) |
| US - Oregon Permissible Exposure Limits (Z-1) US - Pennsylvania - Hazardous Substance List US - Rhode Island Hazardous Substance List ETHYLENE GLYCOL MONOBUTYL ETHER(111-76-2) IS FOUND ON THE FOLLOWING R International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs US - Alaska Limits for Air Contaminants US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (RELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants US - Hawaii Air Contaminant Limits US - Idaho - Limits for Air Contaminants US - Massachusetts - Right To Know Listed Chemicals US - Michigan Exposure Limits for Air Contaminants US - Minesota Permissible Exposure Limits (PELs) US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): Carcinogens | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory EGULATORY LISTS US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminant US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants US - Washington Permissible exposure limits of air contaminants US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants US - Wyoming Toxic and Hazardous Substances (MRLs) US ACGIH Threshold Limit Values (TLV) - Carcinogens US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs) US Clean Air Act - Hazardous Air Pollutants US EPCRA Section 313 Chemical List US NIOSH Recommended Exposure Limits (RELs) US OSHA Permissible Exposure Levels (PELs) - Table Z1 |

SILICA CRYSTALLINE - QUARTZ(14808-60-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants

| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC | US - Rhode Island Hazardous Substance List | |
|---|--|--|
| Monographs | US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants | |
| US - Alaska Limits for Air Contaminants | US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants | |
| US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs) | US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants | |
| US - California Permissible Exposure Limits for Chemical Contaminants | US - Washington Permissible exposure limits of air contaminants | |
| US - California Proposition 65 - Carcinogens | US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values | |
| US - Hawaii Air Contaminant Limits | US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants | |
| US - Idaho - Limits for Air Contaminants | US - Wyoming Toxic and Hazardous Substances Table Z-3 Mineral Dusts | |
| US - Idaho - Toxic and Hazardous Substances - Mineral Dust | US ACGIH Threshold Limit Values (TLV) - Carcinogens | |
| US - Massachusetts - Right To Know Listed Chemicals | US National Toxicology Program (NTP) 14th Report Part A Known to be Human Carcinogens | |
| US - Michigan Exposure Limits for Air Contaminants | US NIOSH Recommended Exposure Limits (RELs) | |
| US - Minnesota Permissible Exposure Limits (PELs) | US OSHA Permissible Exposure Levels (PELs) - Table Z1 | |
| US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL): | US OSHA Permissible Exposure Levels (PELs) - Table Z3 | |
| Carcinogens | US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Risk | |
| US - Oregon Permissible Exposure Limits (Z-1) | Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for | |
| US - Oregon Permissible Exposure Limits (Z-3) | Chemicals Causing Reproductive Toxicity | |
| US - Pennsylvania - Hazardous Substance List | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory | |

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

| Immediate (acute) health hazard | Yes |
|---------------------------------|-----|
| Delayed (chronic) health hazard | Yes |
| Fire hazard | No |
| Pressure hazard | No |
| Reactivity hazard | No |

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

None Reported

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PREPOSITION 65 - CARCINOGENS & REPRODUCTIVE TOXICITY (CRT): LISTED SUBSTANCE

Benzophenone, Silica, crystalline (airborne particles of respirable size) Listed

| National Inventory | Status |
|----------------------------------|--|
| Australia - AICS | Υ |
| Canada - DSL | Υ |
| Canada - NDSL | N (silica crystalline - quartz; ferric oxide; ethylene glycol monobutyl ether; benzophenone) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | N (silica crystalline - quartz; ferric oxide; ethylene glycol monobutyl ether; benzophenone) |
| Korea - KECI | Y |
| New Zealand - NZIoC | Υ |
| 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

CONTACT POINT

PLEASE NOTE THAT TITANIUM DIOXIDE IS NOT PRESENT IN CLEAR OR NEUTRAL BASES

Other information

Ingredients with multiple cas numbers

| Name | CAS No |
|-----------------------------|--|
| silica crystalline - quartz | 14808-60-7, 122304-48-7, 122304-49-8, 12425-26-2, 1317-79-9, 70594-95-5, 87347-84-0, 308075-07-2 |
| | |

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.

end of SDS

Crack Filler Red 5060

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

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