# SAFETY DATA SHEET

## Section 1 - Identification

**Product identifier** **Cattleguard Pour-On for Cattle and Red Deer**

**Other means of identification** None.

**Recommended use of the chemical and restrictions on use**

**Recommended use** Veterinary product used as anti-worm agent (anthelmintic)

**Restrictions on use** Not for human use

**Details of manufacturer or importer**

**Company Name (AU)** Zoetis Australia Pty Ltd
ABN 94 156 476 425
Level 6, 5 Rider Boulevard
Rhodes NSW 2138 AUSTRALIA

**Tel** 1800 814 883

**Fax** (02) 8876 0444

**Email** productsupport.au@zoetis.com

**Emergency Phone** 1800 814 883 (all hours)

**Police and Fire Brigade** Dial 000

**If ineffective** Dial Poisons Information Centre (13 1126 from anywhere in Australia)

## Section 2 - Hazard(s) identification

**Classification of the hazardous chemical**

| | | |
|---|---|---|
| **Physical hazards** | Not classified. | |
| **Health hazards** | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | Specific target organ toxicity following repeated exposure | Category 1 |
| | Aspiration hazard | Category 1 |
| **Environmental hazards** | Hazardous to the aquatic environment, acute hazard | Category 1 |
| | Hazardous to the aquatic environment, long-term hazard | Category 1 |

**Label elements, including precautionary statements**

**Hazard symbol(s)**

Health hazard | Exclamation mark | Environment

**Signal word** Danger

**Hazard statement(s)** May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s)**

**Prevention** Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.

| | |
|---|---|
| **Response** | IF SWALLOWED: Immediately call a POISON CENTRE/doctor. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage. |
| **Storage** | Store locked up. |
| **Disposal** | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Supplemental information** | None. |
| **Other hazards which do not result in classification** | None known. |

## Section 3 - Composition and information on ingredients

**Mixture**

| Identity of chemical ingredients | CAS number and other unique identifiers | Concentration of ingredients (%) |
|---|---|---|
| Petroleum solvent naphtha, light aromatic | 64742-95-6 | 15 |
| Butene, homopolymer | 9003-29-6 | 10 |
| Moxidectin<br>Moxidectin Technical Material (MTM) | 113507-06-5 | 0.5 |
| Butylated hydroxyanisole | 25013-16-5 | <0.1 |

**Composition comments** Other components below reportable levels

## Section 4 - First aid measures

**Description of necessary first aid measures**

| | |
|---|---|
| **Inhalation** | Move to fresh air. Call a physician if symptoms develop or persist. |
| **Skin contact** | Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. |
| **Eye contact** | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. |
| **Ingestion** | Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. |
| **Personal protection for first-aid responders** | You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |
| **Symptoms caused by exposure** | Aspiration may cause pulmonary oedema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects. |
| **Medical attention and special treatment** | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |

## Section 5 - Firefighting measures

| | |
|---|---|
| **Specific hazards arising from the chemical** | During fire, gases hazardous to health may be formed. |
| **Special protective equipment and precautions for fire fighters** | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| **Fire fighting equipment/instructions** | Move containers from fire area if you can do so without risk. |
| **Hazchem code** | None. |
| **General fire hazards** | No unusual fire or explosion hazards noted. |
| **Specific methods** | Use standard firefighting procedures and consider the hazards of other involved materials. |

**Extinguishing media**

| | |
|---|---|
| **Suitable extinguishing media** | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

## Section 6 - Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** Keep unnecessary personnel away.

**For emergency responders** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

**Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containment and cleaning up** Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

## Section 7 - Handling and storage

**Precautions for safe handling** Do not breathe mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store locked up. Store in tightly closed container. Store below 30°C. Protect from light. Store away from incompatible materials (see Section 10 of the SDS).

## Section 8 - Exposure controls and personal protection

**Control parameters** Follow standard monitoring procedures.

**Occupational exposure limits**

**Zoetis**

| Components | Type | Value |
|---|---|---|
| Moxidectin (CAS 113507-06-5) | TWA | 70 µg/m3 |

**Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)**

| Components | Type | Value | Form |
|---|---|---|---|
| Butylated hydroxyanisole (CAS 25013-16-5) | TWA | 20 mg/m3 | Vapor and aerosol, inhalable fraction. |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls** Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

**Individual protection measures, for example personal protective equipment (PPE)**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection should be provided in instances where exposure to dust, mists, aerosols or vapors are likely. If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the OEL.

| | |
|---|---|
| **Thermal hazards** | Not applicable. |
| **Hygiene measures** | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

## Section 9 - Physical and chemical properties

| | |
|---|---|
| **Odour** | Not available. |
| **Odour threshold** | Not available. |
| **pH** | Not available. |
| **Melting point/freezing point** | Not available. |
| **Initial boiling point and boiling range** | Not available. |
| **Flash point** | Not available. |
| **Evaporation rate** | Not available. |
| **Flammability (solid, gas)** | Not applicable. |
| **Upper/lower flammability or explosive limits** | |
| **Explosive limit - lower ( %)** | Not available. |
| **Explosive limit – upper (%)** | Not available. |
| **Vapour pressure** | Not available. |
| **Vapour density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | |
| **Solubility (water)** | Not available. |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |
| **Other physical and chemical parameters** | |
| **Explosive properties** | Not explosive. |
| **Oxidising properties** | Not oxidising. |
| **Appearance** | |
| **Physical state** | Liquid. |
| **Form** | Oily liquid |
| **Colour** | Colorless to Pale yellow |

## Section 10 - Stability and reactivity

| | |
|---|---|
| **Reactivity** | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| **Chemical stability** | Material is stable under normal conditions. |
| **Possibility of hazardous reactions** | No dangerous reaction known under conditions of normal use. |
| **Conditions to avoid** | Contact with incompatible materials. |
| **Incompatible materials** | Strong oxidising agents. |
| **Hazardous decomposition products** | Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. |

## Section 11 - Toxicological information

**Information on possible routes of exposure**

| | |
|---|---|
| **Inhalation** | Prolonged inhalation may be harmful. |
| **Skin contact** | Causes skin irritation. |
| Moxidectin | Species: Rabbit<br>Severity: Mild |

**Eye contact** Causes serious eye irritation.

Moxidectin — Species: Rabbit; Severity: Moderate

**Ingestion** Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

**Symptoms related to exposure** Aspiration may cause pulmonary oedema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Acute toxicity** May be fatal if swallowed and enters airways.

| Components | Species | Test Results |
|---|---|---|
| Butylated hydroxyanisole (CAS 25013-16-5) | | |
| **Acute** | | |
| **Intraperitoneal** | | |
| LD50 | Rat | 881 mg/kg |
| **Oral** | | |
| LD50 | Mouse | 1100 mg/kg |
| | Rat | 2000 mg/kg |
| **Chronic** | | |
| **Oral** | | |
| LOAEL | Rat | 3300 mg/kg, 12 days Liver Blood |
| Moxidectin (CAS 113507-06-5) | | |
| **Acute** | | |
| **Dermal** | | |
| LD50 | Rat | > 2000 mg/kg |
| **Oral** | | |
| LD50 | Rat | 106 mg/kg |
| **Chronic** | | |
| **Oral** | | |
| NOEL | Mouse | 30 mg/kg/day, 2 years (Not carcinogenic) |
| | Rat | 100 mg/kg/day, 2 years (Not carcinogenic) |
| **Subacute** | | |
| **Oral** | | |
| LOEL | Rat | 100 mg/kg/day, 28 days (Central Nervous System) |
| NOEL | Mouse | 75 mg/kg/day, 28 days (Central nervous system) |
| **Subchronic** | | |
| **Oral** | | |
| NOEL | Dog | 10 mg/kg/day, 90 days (Central Nervous System) |
| | Rat | 50 mg/kg/day, 13 weeks (Central Nervous System) |

**Skin corrosion/irritation** Causes skin irritation.

**Corrosivity**

Moxidectin — Species: Rabbit; Severity: Mild

**Serious eye damage/irritation** Causes serious eye irritation.

**Eye contact**

Moxidectin — Species: Rabbit; Severity: Moderate

**Respiratory or skin sensitisation**

**Respiratory sensitisation** Due to partial or complete lack of data the classification is not possible.

**Skin sensitisation** Due to partial or complete lack of data the classification is not possible.

**Skin Sensitisation**

| | |
|---|---|
| Moxidectin | Species: Guinea Pig<br>Severity: Negative |

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Mutagenicity**

| | |
|---|---|
| Moxidectin | In Vitro Bacterial Mutagenicity (Ames)<br>Result: Negative<br>Species: Salmonella , E. coli |
| Butylated hydroxyanisole | In Vitro Bacterial Mutagenicity (Ames)<br>Result: Negative<br>Species: Salmonella |
| Moxidectin | In Vitro HGPRT Forward Gene Mutation Assay<br>Result: Negative<br>Species: Chinese Hamster Ovary (CHO) cells |
| | In Vivo Cytogenetics<br>Result: Negative<br>Species: Rat Bone Marrow |
| Butylated hydroxyanisole | In Vivo Micronucleus<br>Result: Negative<br>Species: Bone marrow |
| Moxidectin | In Vivo Unscheduled DNA Synthesis<br>Result: Negative<br>Species: Rat Hepatocyte |

**Carcinogenicity** Due to partial or complete lack of data the classification is not possible.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| Butylated hydroxyanisole (CAS 25013-16-5) | 2B Possibly carcinogenic to humans. |
| Petroleum solvent naphtha, light aromatic (CAS 64742-95-6) | 3 Not classifiable as to carcinogenicity to humans. |

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Developmental effects**

| | |
|---|---|
| Moxidectin | 1 mg/kg/day Embryo / Fetal Development, (Maternal toxicity, Not teratogenic)<br>Result: NOEL<br>Species: Rabbit<br>Organ: Oral route |
| Butylated hydroxyanisole | 30 g/kg Embryo / Fetal Development, teratogenic<br>Result: LOEL<br>Species: Rat<br>Organ: Oral |
| Moxidectin | 5 mg/kg/day Embryo / Fetal Development, (Negative)<br>Result: NOEL<br>Species: Rat<br>Organ: Oral route |
| | 5 mg/kg/day Embryo / Fetal Development, (Not Teratogenic, Embryotoxicity, Maternal Toxicity)<br>Result: NOEL<br>Species: Rat<br>Organ: Oral route |

**Specific target organ toxicity - single exposure** Due to partial or complete lack of data the classification is not possible.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure.

## Section 12 - Ecological information

**Ecotoxicity** Avoid release to the environment. Very toxic to aquatic life with long lasting effects.

| Components | | Species | Test Results |
|---|---|---|---|
| Moxidectin (CAS 113507-06-5) | | | |
| **Aquatic** | | | |
| Algae | ErC50 | Green algae (Selenastrum capricornutum) | > 87 ppb, 72 Hours |
| Crustacea | EC50 | Daphnia magna (Water Flea) | 30 ppt, 48 Hours |
| Fish | LC50 | Lepomis macrochirus (Bluegill Sunfish) | 0.62 ppb, 96 Hours |
| | | Oncorhynchus mykiss (rainbow trout) | 0.16 ppb, 96 Hours |

**Persistence and degradability** No data available for this product. The following information is available for the individual ingredients.

**Biodegradability**

**Percent Degradation (Aerobic Biodegradation)**

| | |
|---|---|
| Moxidectin | Soil DT50, ca. 2 months @ 25°C / 77°F |

**Bioaccumulative potential** No data available for this product. The following information is available for the individual ingredients.

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| Moxidectin | 4.77, @ 25°C / 77°F |

**Mobility in soil** No data available for this product.

**Adsorption**

**Soil/Sediment Sorption - Log Koc**

| | |
|---|---|
| Moxidectin | 4.3 - 4.6 |

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## Section 13 - Disposal considerations

**Disposal methods** Avoid release to the environment. Do not allow this material to drain into sewers/water supplies. Do not discharge into drains, water courses or onto the ground. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Residual waste** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## Section 14 - Transport information

**ADG**

Not regulated as dangerous goods.

**RID**

**UN number** UN3082

**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Moxidectin, Petroleum solvent naphtha, light aromatic)

**Transport hazard class(es)**

**Class** 9

| | |
|---|---|
| **Subsidiary risk** | - |
| **Label(s)** | 9 |
| **Packing group** | III |
| **Environmental hazards** | Yes |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

**IATA**

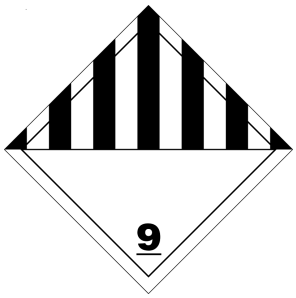
| | |
|---|---|
| **UN number** | UN3082 |
| **UN proper shipping name** | Environmentally hazardous substance, liquid, n.o.s. (Moxidectin, Petroleum solvent naphtha, light aromatic) |
| **Transport hazard class(es)** | |
| **Class** | 9 |
| **Subsidiary risk** | - |
| **Packing group** | III |
| **Environmental hazards** | Yes |
| **ERG Code** | 9L |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **Other information** | |
| **Passenger and cargo aircraft** | Allowed with restrictions. |
| **Cargo aircraft only** | Allowed with restrictions. |

**IMDG**

| | |
|---|---|
| **UN number** | UN3082 |
| **UN proper shipping name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Moxidectin, Petroleum solvent naphtha, light aromatic), MARINE POLLUTANT |
| **Transport hazard class(es)** | |
| **Class** | 9 |
| **Subsidiary risk** | - |
| **Packing group** | III |
| **Environmental hazards** | |
| **Marine pollutant** | Yes |
| **EmS** | F-A, S-F |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

| | |
|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not established. |

**IATA; IMDG; RID**




**Marine pollutant**

**General information** IMDG Regulated Marine Pollutant. As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Liters or less for liquids or having a net mass per single or inner packaging of 5 kilograms or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375.

## Section 15 - Regulatory information

**Safety, health and environmental regulations**

**National regulations** This SDS replaces version: issued 3 Dec 2021.
Poison Schedule (Product) – Schedule 5
APVMA Approval No.: 66931
This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals.

**Australia Medicines & Poisons Schedule 4**

Moxidectin (CAS 113507-06-5)

**Australia Medicines & Poisons Schedule 5**

Moxidectin (CAS 113507-06-5)

**Australia Medicines & Poisons Schedule 6**

Moxidectin (CAS 113507-06-5)

**Australia Medicines & Poisons Schedule 7**

Moxidectin (CAS 113507-06-5)

**High Volume Industrial Chemicals (HVIC)**

| | |
|---|---|
| Petroleum solvent naphtha, light aromatic (CAS 64742-95-6) | 10000 - 99999 TONNES See the regulation for additional information. |

**Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10, as amended)**

Not listed.

**National Pollutant Inventory (NPI) substance reporting list**

Not listed.

**Prohibited Carcinogenic Substances**

Not regulated.

**Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)**

Not listed.

**Restricted Carcinogenic Substances**

Not regulated.

**Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)**

Not listed.

**International regulations**

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Industrial Chemicals (AICIS) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## Section 16 - Any other relevant information

| | |
|---|---|
| **Issue date** | 14-March-2023 |
| **Key abbreviations or acronyms used** | AICIS: Australian Inventory of Industrial Chemicals. |
| **Disclaimer** | Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently available. |