SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

|  |  |  |
| --- | --- | --- |
| Product form | : | Mixture |
| Product name | : | GK Gel desicant |

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

|  |  |  |
| --- | --- | --- |
| Main use category | : | Industrial use |
| Use of the substance/mixture | : | Desiccant |

1.2.2. Uses advised against

|  |  |  |
| --- | --- | --- |
| Restrictions on use | : | Anything other than the above |

1.3. Details of the supplier of the safety data sheet

|  |
| --- |
| R-Tech Solutions Unit 1 Pinner Parc Whitland SA34 0RA United Kingdom Telephone: 01994 240500 E-mail: sales@desiccants.co.uk |

1.4. Emergency telephone number

|  |  |  |
| --- | --- | --- |
| Emergency number | : | 019940240550 (Monday - Friday, 09:00 - 17:00) English |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

|  |  |  |
| --- | --- | --- |
| Eye Irrit. 2 | H319 |  |

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Hazard pictograms (CLP) | : | GHS07 |  |  |  |  |  |
|  |  | GHS07 |  |  |  |  |  |
| Signal word (CLP) | : | Warning | | | | | |
| Hazard statements (CLP) | : | H319 - Causes serious eye irritation. | | | | | |
| Precautionary statements (CLP) | : | P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective clothing, eye protection, face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. | | | | | |

2.3. Other hazards

|  |
| --- |
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |
| Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII |

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| --- | --- | --- | --- |
| Calcium chloride | CAS-No.: 10043-52-4  EC No.: 233-140-8  EC index No.: 017-013-00-2  REACH-no: 01-2119494219-28-0048 | 50 – 75 | Eye Irrit. 2, H319 |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

|  |  |  |
| --- | --- | --- |
| First-aid measures general | : | No special measures required. |
| First-aid measures after inhalation | : | If symptoms develop obtain medical attention. |
| First-aid measures after skin contact | : | If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water. |
| First-aid measures after eye contact | : | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| First-aid measures after ingestion | : | If symptoms develop, obtain medical attention. |

4.2. Most important symptoms and effects, both acute and delayed

|  |  |  |
| --- | --- | --- |
| Symptoms/effects | : | No information available. |
| Symptoms/effects after inhalation | : | Dust from this product may cause respiratory irritation. |
| Symptoms/effects after skin contact | : | Repeated and/or prolonged skin contact may cause irritation. |
| Symptoms/effects after eye contact | : | Causes eye irritation. |
| Symptoms/effects after ingestion | : | Not expected to present a significant hazard under anticipated conditions of normal use. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact ophthalmologist immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

|  |  |  |
| --- | --- | --- |
| Suitable extinguishing media | : | ABC-powder. Alcohol resistant foam. |
| Unsuitable extinguishing media | : | None known. |

5.2. Special hazards arising from the substance or mixture

|  |  |  |
| --- | --- | --- |
| Fire hazard | : | The product is not flammable. |
| Hazardous decomposition products in case of fire | : | Thermal decomposition can lead to release of irritating and toxic gases and vapours. Carbon dioxide. Carbon monoxide. |

5.3. Advice for firefighters

|  |  |  |
| --- | --- | --- |
| Precautionary measures fire | : | Exercise caution when fighting any chemical fire. |
| Firefighting instructions | : | Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Avoid fire-fighting water entering the environment. |
| Protection during firefighting | : | Do not enter fire area without proper protective equipment, including respiratory protection. |
| Other information | : | Prevent runoff from entering water courses, sewers and basements. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

|  |  |  |
| --- | --- | --- |
| Protective equipment | : | See Section 8. Wear suitable protective clothing, gloves and eye or face protection. |
| Emergency procedures | : | Ventilate area. Avoid inhalation of dust from dried product. Avoid contact with eyes, skin and clothing. |
| Measures in case of dust release | : | Remove ignition sources. See Section 8. |

6.1.2. For emergency responders

|  |  |  |
| --- | --- | --- |
| Protective equipment | : | See Section 8. Wear suitable protective clothing, gloves and eye or face protection. |
| Emergency procedures | : | Ventilate area. Avoid inhalation of dust from dried product. Avoid contact with skin, eyes and clothing. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

|  |  |  |
| --- | --- | --- |
| For containment | : | Clear spills immediately. |
| Methods for cleaning up | : | Sweep or shovel spills into appropriate container for disposal. |

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

|  |  |  |
| --- | --- | --- |
| Precautions for safe handling | : | Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe dust. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No smoking. Ensure equipment is adequately earthed. |
| Hygiene measures | : | Keep good industrial hygiene. When using do not eat, drink or smoke. Take off contaminated clothing. Keep away from food, drink and animal feeding stuffs. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

|  |  |  |
| --- | --- | --- |
| Storage conditions | : | Store in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Store in tightly closed, properly ventilated containers away from heat, sparks, open flame, strong oxidizers, radiations, and other initiators. |
| Incompatible materials | : | Strong acids. Strong bases. Alkalis. |
| Maximum storage period | : | 24 months |
| Storage temperature | : | 5 – 40 °C |
| Heat and ignition sources | : | No flames, no sparks. Eliminate all sources of ignition. Do not smoke. |
| Packaging materials | : | Keep only in the original container in a cool,well-ventilated place away from combustible materials. |

7.3. Specific end use(s)

Desiccant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Exposure limit values for the other components

| Dust | | |
| --- | --- | --- |
| Ireland - Occupational Exposure Limits | | |
| Local name | Dusts non-specific |  |
| OEL (8 hours ref) (mg/m³) | 10 mg/m³ total inhalable 4 mg/m³ respirable |  |
| Regulatory reference | Chemical Agents Code of Practice 2021 |  |
| United Kingdom - Occupational Exposure Limits | | |
| Local name | Dust |  |
| WEL TWA (mg/m³) | 10 mg/m³ inhalable dust 4 mg/m³ Respirable dust |  |
| Regulatory reference | EH40/2005 (Fourth edition, 2020). HSE |  |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

|  |
| --- |
| Appropriate engineering controls: |
| Provide adequate ventilation, including appropriate local extraction, to ensure that occupational exposure limits are not exceeded. Provide adequate ventilation to minimise dust concentrations. Avoid contact with skin, eyes and clothing. Emergency eye wash stations should be available in the immediate vicinity of any potential exposure. |

8.2.2. Personal protection equipment

|  |
| --- |
| Personal protective equipment: |
| Wear suitable protective clothing. Avoid all unnecessary exposure. |

8.2.2.1. Eye and face protection

|  |
| --- |
| Eye protection: |
| Chemical goggles or safety glasses. Standard EN 166 - Personal eye-protection. |

8.2.2.2. Skin protection

|  |
| --- |
| Skin and body protection: |
| Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact |

|  |
| --- |
| Hand protection: |
| The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Standard EN 374 - Protective gloves against chemicals. Wear chemically resistant protective gloves. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. |

8.2.2.3. Respiratory protection

|  |
| --- |
| Respiratory protection: |
| Wear a mask. Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment |

8.2.2.4. Thermal hazards

|  |
| --- |
| Thermal hazard protection: |
| Not required for normal conditions of use. |

8.2.3. Environmental exposure controls

|  |
| --- |
| Environmental exposure controls: |
| Avoid release to the environment. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

|  |  |  |
| --- | --- | --- |
| Physical state | : | Solid |
| Appearance | : | Granular powder. |
| Colour | : | yellowish. |
| Odour | : | Odourless. |
| Odour threshold | : | No data available |
| pH | : | No data available |
| Relative evaporation rate (butylacetate=1) | : | No data available |
| Melting point | : | No data available |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Flammability (solid, gas) | : | No data available |
| Vapour pressure | : | No data available |
| Relative vapour density at 20°C | : | No data available |
| Relative density | : | 1527 |
| Density | : | 1527.2 kg/m³ |
| Solubility | : | Very slightly soluble. |
| Log Pow | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |
| Explosive properties | : | No data available |
| Oxidising properties | : | No data available |
| Explosive limits | : | No data available |

9.2. Other information

|  |  |  |
| --- | --- | --- |
| Lead | : | 0 ppm |

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended handling and storage conditions (see section 7).

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Alkalis. Strong bases.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating and toxic gases and vapours. Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

|  |  |  |
| --- | --- | --- |
| Acute toxicity (oral) | : | Not classified |
| Acute toxicity (dermal) | : | Not classified |
| Acute toxicity (inhalation) | : | Not classified |

| Calcium chloride (10043-52-4) | |
| --- | --- |
| LD50 oral, rat | 2301 mg/kg |
| LD50 dermal, rabbit | > 5000 mg/kg |

|  |  |  |
| --- | --- | --- |
| Skin corrosion/irritation | : | Not classified |

|  |  |  |
| --- | --- | --- |
| Serious eye damage/irritation | : | Causes serious eye irritation. |

|  |  |  |
| --- | --- | --- |
| Respiratory or skin sensitisation | : | Not classified |

|  |  |  |
| --- | --- | --- |
| Germ cell mutagenicity | : | Not classified |

|  |  |  |
| --- | --- | --- |
| Carcinogenicity | : | Not classified |

|  |  |  |
| --- | --- | --- |
| Reproductive toxicity | : | Not classified |

|  |  |  |
| --- | --- | --- |
| STOT-single exposure | : | Not classified |

|  |  |  |
| --- | --- | --- |
| STOT-repeated exposure | : | Not classified |

|  |  |  |
| --- | --- | --- |
| Aspiration hazard | : | Not classified |

SECTION 12: Ecological information

12.1. Toxicity

|  |  |  |
| --- | --- | --- |
| Hazardous to the aquatic environment, short–term (acute) | : | Not classified |
| Hazardous to the aquatic environment, long–term (chronic) | : | Not classified |

| Calcium chloride (10043-52-4) | |
| --- | --- |
| EC50 Daphnia | 2400 mg/l |
| NOEC chronic fish | 230 mg/l 25 days (OECD 210 method) |

12.2. Persistence and degradability

| Calcium chloride (10043-52-4) | |
| --- | --- |
| Persistence and degradability | Readily biodegradable. |

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

| GK Gel desicant |
| --- |
| This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII |
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

| Component | |
| --- | --- |
| Calcium chloride (10043-52-4) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII  This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

|  |  |  |
| --- | --- | --- |
| Waste treatment methods | : | Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| Additional information | : | Handle empty containers with care. |
| Ecology - waste materials | : | Avoid release to the environment. |
| European List of Waste (LoW) code | : | 16 03 03\* - inorganic wastes containing dangerous substances |

SECTION 14: Transport information

In accordance with / ADR / IMDG / IATA / ADN / RID

14.1 UN number

|  |  |  |
| --- | --- | --- |
| UN-No. (ADR) | : | Not applicable |
| UN-No. (IMDG) | : | Not applicable |
| UN-No. (IATA) | : | Not applicable |
| UN-No. (ADN) | : | Not applicable |
| UN-No. (RID) | : | Not applicable |

14.2. UN proper shipping name

|  |  |  |
| --- | --- | --- |
| Proper Shipping Name | : | Not applicable |
| Proper Shipping Name (IMDG) | : | Not applicable |
| Proper Shipping Name (IATA) | : | Not applicable |
| Proper Shipping Name (ADN) | : | Not applicable |
| Proper Shipping Name (RID) | : | Not applicable |

14.3. Transport hazard class(es)

|  |  |  |
| --- | --- | --- |
| ADR | | |
| Transport hazard class(es) (ADR) | : | Not applicable |

|  |  |  |
| --- | --- | --- |
| IMDG | | |
| Transport hazard class(es) (IMDG) | : | Not applicable |

|  |  |  |
| --- | --- | --- |
| IATA | | |
| Transport hazard class(es) (IATA) | : | Not applicable |

|  |  |  |
| --- | --- | --- |
| ADN | | |
| Transport hazard class(es) (ADN) | : | Not applicable |

|  |  |  |
| --- | --- | --- |
| RID | | |
| Transport hazard class(es) (RID) | : | Not applicable |

14.4. Packing group

|  |  |  |
| --- | --- | --- |
| Packing group | : | Not applicable |
| Packing group (IMDG) | : | Not applicable |
| Packing group (IATA) | : | Not applicable |
| Packing group (ADN) | : | Not applicable |
| Packing group (RID) | : | Not applicable |

14.5. Environmental hazards

|  |  |  |
| --- | --- | --- |
| Dangerous for the environment | : | No |
| Marine pollutant | : | No |
| Other information | : | No supplementary information available |

14.6. Special precautions for user

|  |
| --- |
| Overland transport |
| Not applicable |

|  |
| --- |
| Transport by sea |
| Not applicable |

|  |
| --- |
| Air transport |
| Not applicable |

|  |
| --- |
| Inland waterway transport |
| Not applicable |

|  |
| --- |
| Rail transport |
| Not applicable |

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out

SECTION 16: Other information

| Abbreviations and acronyms: | |
| --- | --- |
|  | ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route) |
|  | CAS (Chemical Abstracts Service) number |
|  | CLP (Classification, Labeling and Packaging) |
|  | DNEL (Derived No Effect Level) |
|  | EC (European Community) |
|  | EN (European Norm) |
|  | IARC (International Agency for Research on Cancer) |
|  | IATA (International Air Transport Association) |
|  | IBC (Intermediate Bulk Container) |
|  | IMDG (International Maritime Dangerous Goods Code) |
|  | Koc (Soil adsorption coefficient) |
|  | LC50 (Lethal Concentration 50%) |
|  | LD50 (Lethal Dose 50%) |
|  | OECD (Organisation for Economic Co-operation and Development) |
|  | OEL (Occupational exposure limit) |
|  | PBT (Persistent, Bioaccumulative and Toxic) |
|  | PNEC (Predicted No Effect Concentration) |
|  | REACH (Registration, Evaluation and Authorisation of CHemicals) |
|  | STEL (Short Term Exposure Limit) |
|  | UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods) |
|  | vPvB (very Persistent and very Bioaccumulative) |

|  |  |  |
| --- | --- | --- |
| Data sources | : | REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Supplier's safety documents. ECHA (European Chemicals Agency). |
| Other information | : | Classification procedure according to Regulation (EC) No. 1272/2008 [CLP]: Physical hazards: On basis of test data. Health hazards: On basis of test data. Environmental hazards: On basis of test data. |

| Full text of H- and EUH-statements: | |
| --- | --- |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H319 | Causes serious eye irritation. |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.