

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name: KU63 INDUSTRIAL GRANULES

Article number: KU63

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

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Tygris Industrial
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Email technical@tygrisindustrial.com

Further information obtainable from: Technical Department

Emergency telephone number: Tel +44 (0) 1294 311 066

2. Hazards identification

2.1 Classification of the substance or mixture The substance is not classified according to the CLP regulations.
Classification according to Regulation (EC) No 1272/2008

Classification according to Directive 67/548/EEC or Directive 1999/45/EC None

Information concerning particular hazards for human and environment No hazards to be particularly mentioned

3. Composition/information on ingredients

3.1 Substances 93685-99-5 Oil shale, thermal processing residue
CAS No. Description

EC number 297-648-1

Additional information This product is UVCB substance

Components CAS: 14808-60-7
EINECS: 238-878-4
Quartz (SiO₂) <3% CAS 14808-60-7 EINECS 238-878-4

SVHC None

4. First aid measures

4.1. Description of first aid measures

General information	No special measures required
After inhalation	Supply fresh air; consult doctor in case of complaints
After skin contact	Generally the product does not irritate the skin. Rinse with warm water. If skin irritation continues, consult a doctor.
After eye contact	Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor
After swallowing	Rinse out mouth and then drink plenty of water. If symptoms persist consult doctor. NOTE: Never give an unconscious person anything to drink

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available

5. Firefighting measures

5.1 Extinguishing media Suitable extinguishing agents	The product is not flammable. Use fire extinguishing methods suitable to surrounding conditions
For safety reasons unsuitable extinguishing agents	None
5.3 Advice for firefighters Protective equipment	Wear fully protective suit. Mouth respiratory protective device
Additional information	Collect contaminated fire fighting water separately. It must not enter the sewage system

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	Avoid formation of dust. Ensure adequate ventilation. Wear protective clothing. Use respiratory protective device against the effects of fumes/dust/aerosol.
6.2 Environmental precautions	Do not allow product to reach sewage system or any water course
6.3 Methods and material for containment and cleaning up	Pick up mechanically
6.4 Reference to other sections	See Section 8 for information on personal protection equipment

7. Handling and storage

7.1 Precautions for safe handling	Prevent formation of dust. Ensure good ventilation/exhaustion at the workplace
Information about fire - and explosion protection	No special measures required. The product is not flammable
7.2 Conditions for safe storage, including any incompatibilities	Store in dry conditions. Protect from humidity and water.
Requirements to be met by storerooms and receptacles	
Information about storage in one common storage facility	Store away from water. Do not store together with oxidizing and acidic materials
Further information about storage conditions	None
7.3 Specific end use(s)	No further relevant information available

8. Exposure controls/personal protection

Additional information about design of technical facilities	Ventilation must be sufficient to maintain TLV-TWA below 3 mg/m ³ , respirable particles, and 10 mg/m ³ , inhalable particles [ACGIH recommendation for Particles (Insoluble or poorly soluble). Not Otherwise Specified (PNOS)]
8.1 Control parameters	Not required
Ingredients with limit values that require monitoring at the workplace	
DNELs	Not applicable
PNECs	PNEC aqua (freshwater): 0.1 mg/L PNEC aqua (marine water): 0.01 mg/L PNEC aqua (intermittent releases): 1 mg/L
8.2 Exposure controls	
General protective and hygienic measures	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Do not eat or drink while working. Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work
Respiratory protection	Use suitable respiratory protective device in case of insufficient ventilation
Protection of hands	Protective gloves
Material of gloves	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer
Penetration time of glove material	The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	Safety glasses
Body protection	Light weight protective clothing
Limitation and supervision of exposure into the environment	Based on all data available this product is not considered to pose a risk to the environment
Risk management measures	Do not allow undiluted product or large quantities of it to reach ground water, water course or sewagesystem.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Granules
Colour:	Grey Brown
Odour:	Odourless
pH-value (10 g/l) at 20 °C	10,8
Melting point/Melting range	1050-1200 °C (OECD 102)
Solubility(ies)	Insoluble in water
Boiling point/Boiling range	Undetermined
Flash point	Not applicable. This product is inorganic substance
Flammability (solid, gaseous):	Product is not flammable. (based on molecular structure)
Self-igniting	Not determined
Danger of explosion	Product does not present an explosion hazard. (based on molecular structure)
Explosion limits	None
Oxidizing properties	None. The substance does not contain any groups associated with oxidising properties.
Vapour pressure	Not determined. (melting point > 300)
Bulk density at 20 °C:	690 kg/m ³
Solubility in / Miscibility with water at 20 °C:	< 1 g/l (OECD 105)
Partition coefficient (n-octanol/water):	Not applicable This substance is inorganic chemical.
Viscosity	Not applicable. This product is solid. Viscosity is only relevant to liquids.
9.2 Other information	Granulometry: d10=2200 µm d50=3300 µm d90=5000 µm

10. Stability and reactivity

10.1 Reactivity	Reacts with strong acids and oxidizing agents
10.2 Chemical stability	No decomposition if used and stored according to specifications.
10.3 Possibility of hazardous reactions	None
10.4 Conditions to avoid	Water
10.5 Incompatible materials	Water
10.6 Hazardous decomposition products	None
Additional information	This product is hygroscopic

11. Toxicological information

11.1 Information on toxicological effects

LD/LC50 values relevant for classification	No reliable study with this product is present. This study is conducted on an analogous substance. (read-across) no classification is necessary
68131-74-8 Fluidized Bed Combustion (FBC) Fly Ash	Oral LD50 >2000 mg/kg (rat) (OECD 423)
Specific symptoms in biological assay	This product is not considered to present an inhalation risk. (MMAD > 2000 µm)
Effect Species Method	Irritation of skin OECD 404 not irritating (rabbit) Irritation of eyes OECD 437 not irritating (rabbit)
6 8131-74-8 Fluidized Bed Combustion (FBC) Fly Ash	Sensitisation OECD 429 not sensitising (mouse)
Additional toxicological information	When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
Repeated dose toxicity	No classification is necessary. This product is not considered to present an inhalation risk. MMAD > 2000 µm. Respirable Crystalline Silica: % SiO ₂ crystalline in dust <<1%
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Mutagenicity	None Acc. to OECD 471, OECD 476, OECD 487 tests
Carcinogenicity	No data available (no carcinogenicity study needs to be performed as this substance is not genotoxic)
Toxicity for reproduction	no classification is necessary

12. Ecological information

12.1 Toxicity

Aquatic toxicity EC50/21 d (static) 39,3 mg/l (Daphnia magna) (OECD 211, freshwater)
 NOEC (21 d): 1mg/L
 LOEC (21 d): 3.2 mg/L
 EC50/72 h (static) 82,7 mg/L (algae) (OECD 201, freshwater)
 NOEC (72 h): 3.2 mg/L
 LOEC (72 h): 10 mg/L
 LC50/96 h (static) >100 mg/L (fish Oncorhynchus mykiss) (OECD 203, freshwater)
 NOEC > 100 mg/L

12.2 Persistence and degradability

The substance is inorganic; therefore no biodegradation tests are applicable. Based on previous experience, this product is inert and non-degradable.

12.3 Bioaccumulative potential

Does not accumulate in organisms
 Low potential for bioaccumulation (based on substance properties)

12.4 Mobility in soil

Low potential for adsorption (based on substance properties).

Behaviour in sewage processing plants: Type of test Effective concentration Method Assessment

EC50/3 h (static) >1000 mg/L (activated sludge) (OECD 209, freshwater)
 NOEC (3 h): >1000 mg/L

12.5 Results of PBT and vPvB assessment

No assessment is required for inorganic substances

13. Disposal considerations

13.1 Waste treatment methods

Recommendation

Disposal must be made according to official regulations.
 Smaller quantities can be disposed of with household waste

Uncleaned packaging: Recommendation

Packaging may be reused or recycled after cleaning.
 Disposal must be made in accordance with Local Authority requirements

Recommended cleansing agents

Water, if necessary together with cleansing agents

14. Transport information

14.1 UN-Number DOT, ADR, IMDG, IATA	None
14.2 UN proper shipping name DOT, ADR, IMDG, IATA	None
14.3 Transport hazard class(es) DOT, ADR, IMDG, IATA Class	None
14.4 Packing group DOT, ADR, IMDG, IATA	None
14.5 Environmental hazards: Marine pollutant	No
14.6 Special precautions for user	Not applicable
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	None
Transport/Additional information	Not dangerous according to the above specifications
UN "Model Regulation":	None

15. Regulatory information

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

Labelling according to Regulation (EC) No 1272/2008	Void
Hazard pictograms	Void
Signal word	Void
Hazard statements	Void
Additional classification according to Decree on Hazardous Materials, Annex II	None
Substances of very high concern (SVHC) according to REACH, Article 57	None
Registration status (Chemical Inventories listing) :	United States (TSCA) : listed Canada (DSL) : listed Australia (AICS) : listed 36.0.25 Japan (ENCS) : listed Korea (KECI) : listed Philippines (PICCS) : listed NTP (National Toxicology Program) : Substance is not listed IARC (International Agency for Research on Cancer) : Substance is not listed
15.2 Chemical safety assessment:	A Chemical Safety Assessment has been carried out.

16. Other information

Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOEC: No Observed Effect Concentration
LOEC: Lowest Observed Effect Concentration
UVCB: Substances of Unknown or Variable Composition, Complex reaction products or Biological Materials
MMAD: Mass Median Aerodynamic Diameter

Sources

REACH Dossier, 2010
REACH CSR, 2010