SECTION 1: Identification of the substance / preparation and of the company

1.1 Product identifier

LITHOvit UREA 50 - TRIBOdyn Foliar Fertilizer

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

1.2.1 Relevant uses

Foliar and soil fertilizers for field crops, grassland, fodder plants, intensive cultivation, forestry, horticulture and plant cultivation

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

TRIBOdyn AG
Breite Str. 54
37154 Northeim / GERMANY
Phone +49-5551-908907-0
Fax +49-5551-908907-9
Homepage www.tribodyn.ag
E-mail info@tribodyn.ag

Address enquiries to

Technical information info@tribodyn.ag

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency phone

Advisory body +49 (0)89-19240 (24h) (english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

No classification.

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

No classification.

2.2 Label elements

The product does not require a hazard warning label in accordance with EC-directives.

Labelling according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols none

R-phrases none

Special labelling Safety data sheet available for professional user on request.

2.3 Other hazards

Physico-chemical hazards No particular hazards known.

Human health dangers Danger of serious damage to health by prolonged exposure through inhalation.
Frequent persistent contact with the skin can cause skin irritation.

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
< 5	Silicon dioxide
	CAS: 7631-86-9, EINECS/ELINCS: 231-545-4
	GHS/CLP: STOT RE 2: H373
	EEC: Xn, R 48/20

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For full text of H-statements and R-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Change powdered clothing.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Rinse out mouth and give plenty of water to drink.
In the event of symptoms seek for medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Unknown risk of formation of toxic pyrolysis products.
Metal oxides.
Ammonia (NH3).

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation.
Ensure adequate ventillation.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Avoid raising dust.
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid the formation and deposition of dust.
Provide vacuuming if dust raised.

Wash hands before breaks and after work.
Use barrier skin cream.
Do not eat or drink when working.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Store in a dry place.
Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance
40 - <60	Calcium carbonate
	CAS: 471-34-1, EINECS/ELINCS: 207-439-9
	Long-term exposure: 10 mg/m³, inhalable dust
< 5	Silicon dioxide
	CAS: 7631-86-9, EINECS/ELINCS: 231-545-4
	Long-term exposure: 6 mg/m³, total inhalable dust
< 5	Magnesiumcarbonat
	CAS: 546-93-0, EINECS/ELINCS: 208-915-9
	Long-term exposure: 10 mg/m³, inhalable dust; respirable dust: TWA=4 mg/m³

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. To pay attention to dust limit value (ACGHI-2011: 10 mg/m³ particle inhalable; 3 mg/m³ particle respirable).
Eye protection	safety glasses
Hand protection	Nitrile rubber, >120 min (EN 374).
Skin protection	Not required under normal conditions.
Other	Avoid contact with eyes and skin. Do not inhale dust.
Respiratory protection	Respiratory protection in the case of dust formation. Short term: filter apparatus, filter P2.
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	Powder
Color	grey beige yellow
Odor	characteristic
Odour threshold	not applicable
pH-value	not determined
pH-value [1%]	not determined
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	not applicable
Density [g/ml]	not determined
Bulk density [kg/m³]	not determined
Solubility in water	partially soluble
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	~ 134
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	~ 134

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

Reactions with strong oxidizing agents.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Serious eye damage/irritation	not determined
Skin corrosion/irritation	not determined
Respiratory or skin sensitisation	not determined
Specific target organ toxicity — single exposure	not determined
Specific target organ toxicity — repeated exposure	not determined
Mutagenicity	not determined
Reproduction toxicity	not determined
Carcinogenicity	not determined
General remarks	
	No classification on the basis of the calculation procedure of the preparation directive. Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

12.2 Persistence and degradability

Behaviour in environment compartments	not determined
Behaviour in sewage plant	not determined
Biological degradability	not applicable

12.3 Bioaccumulative potential

not applicable

12.4 Mobility in soil

not applicable

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Not required under normal conditions.

Waste no. (recommended) 020199

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150102
150101

SECTION 14: Transport information

14.1 UN number

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2013); IMDG-Code (2013, 36. Amdt.); IATA-DGR (2013).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4
- Observe employment restrictions for people	no
- VOC (1999/13/CE)	0%

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 R-phrases (SECTION 3)

R 48/20: Harmful - danger of serious damage to health by prolonged exposure through inhalation.

16.2 Hazard statements (SECTION 3)

H373 May cause damage to lung through prolonged or repeated exposure through inhale.

16.3 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.4 Other information

Modified position none