

SAFETY DATA SHEET

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

1.1. Product identifier		
Name of the substance	Polyamide resin	
Trade name of the substance	UNI-REZ™ 111	
Identification number	-	
Registration number	-	
Synonyms	None.	
SDS number	8755	
Product code	2000000300	
Issue date	20-December-2016	
Version number	3,0	
Revision date	08-August-2022	
Supersedes date	20-September-2017	
1.2. Relevant identified uses of t	the substance or mixture and uses advised against	
Identified uses	Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation [mixing] of preparations and/or re-packaging (excluding alloys).	
Uses advised against	None known.	
1.3. Details of the supplier of the	e safety data sheet	
Company name	Kraton Chemical B.V.	
Address	Transistorstraat 16, 1322 CE Almere, The Netherlands	
Phone	+31 36 546 2800	
Email address	regulatory.eu@kraton.com	
1.4. Emergency telephone number	EU NCEC +44 1865 407 333	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

This substance does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

Hazard summary	May form explosible dust-air mixture if dispersed.
2.2. Label elements	
Label according to Regulation (EC) No. 1272/2008 as amended
Contains:	Polyamide resin
Hazard pictograms	None.
Signal word	None.
Hazard statements	The substance does not meet the criteria for classification.
Precautionary statements	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Supplemental label information	None.
2.3. Other hazards	May form explosible dust-air mixture if dispersed. This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Matarial names LINIL DEZTM 111	

SECTION 3: Composition/information on ingredients

3.1. Substances			
General information			
Chemical name	% CAS-No. / EC No. REACH Registration No. Index No. Notes		
Polyamide resin	100 Proprietary		
Classif	ication: -		
List of abbreviations and symbo CLP: Regulation No. 1272/200 DSD: Directive 67/548/EEC. M: M-factor vPvB: very persistent and very PBT: persistent, bioaccumulat #: This substance has been as	08. y bioaccumulative substance.		
SECTION 4: First aid meas	sures		
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.		
4.1. Description of first aid meas			
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.		
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.		
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.		
Ingestion	Rinse mouth. Get medical attention if symptoms occur.		
4.2. Most important symptoms and effects, both acute and delayed	Dusts may irritate the respiratory tract, skin and eyes.		
4.3. Indication of any immediate medical attention and special treatment needed	Treat symptomatically.		
SECTION 5: Firefighting m	neasures		
General fire hazards	May form combustible dust concentrations in air.		
5.1. Extinguishing media Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust.		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.		
5.2. Special hazards arising from the substance or mixture	High concentration of airborne dust may form explosive mixture with air. Static charges generate by emptying package in or near flammable vapour may cause flash fire. During fire, gases hazardous to health may be formed. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.		
5.3. Advice for firefighters Special protective	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.		
equipment for firefighters Special fire fighting	In case of fire and/or explosion do not breathe fumes. Wear suitable protective equipment. Move		
procedures Specific methods	containers from fire area if you can do so without risk.		
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.		
SECTION 6: Accidental rel	ease measures		
6.1. Personal precautions, prote For non-emergency personnel	ctive equipment and emergency procedures Wear appropriate personal protective equipment.		
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the		

- 6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

SDS.

6.3. Methods and material for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.
	Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.
	Never return spills to original containers for re-use.
6.4. Reference to other sections	For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.
SECTION 7: Handling and	storage
7.1. Precautions for safe handling	Minimise dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces No smoking. Explosion-proof general and local exhaust ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Follow all SDS/label precautions even after container is emptied because they may retain product residues.

7.2. Conditions for safe
storage, including any
incompatibilitiesKeep containers tightly closed in a dry, cool and well-ventilated place. Store at ambient
temperature and atmospheric pressure. Store away from incompatible materials (see Section 10 of
the SDS).

7.3. Specific end use(s) Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBI. II, no. 184/2001

Additional components	Туре	Value	Form
Dust	МАК	5 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
	STEL	20 mg/m3	Inhalable fraction.
		10 mg/m3	Respirable fraction.
Belgium. Exposure Limit	Values		
Additional components	Туре	Value	Form
Dust	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Finland			
Additional components	Туре	Value	
Dust	TWA	5 mg/m3	
		10 mg/m3	
France. Threshold Limit \	Values (VLEP) for Occupational Exposure	e to Chemicals in France. I	NRS ED 984
Additional components	Туре	Value	Form
Dust	VME	5 mg/m3	Respirable fraction.
Regulatory status:	Regulatory binding (VRC)		
		10 mg/m3	Inhalable fraction.
Regulatory status:	Regulatory binding (VRC)		
Cormany DEC MAK List	(advisory OELs). Commission for the Inv	estigation of Health Hazar	ds of Chemical Compound
in the Work Area (DFG)			
in the Work Area (DFG)	Туре	Value	Form
	Type TWA	Value 4 mg/m3	Form Inhalable dust.
in the Work Area (DFG) Additional components Dust	TWA	4 mg/m3	
in the Work Area (DFG) Additional components Dust		4 mg/m3	
in the Work Area (DFG) Additional components Dust Germany. TRGS 900, Lim	TWA it Values in the Ambient Air at the Workp	4 mg/m3	Inhalable dust.

1,25 mg/m3

Respirable fraction.

Additional components	Туре	Value	Form
Dust	TWA	5 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Ireland. Occupational Exp			
Additional components	Туре	Value	Form
Dust	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Total inhalable dust.
	al exposure limit values of chemical sub	stances in work environme	
Additional components	Туре	Value	Form
Dust	TWA	5 mg/m3	Dust.
Lithuania. OELs. Limit Va	lues for Chemical Substances, General	Requirements	
Additional components	Туре	Value	Form
Dust	TWA	5 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Netherlands			
Additional components	Туре	Value	Form
Dust	TWA (MAC)	5 mg/m3	Respirable dust.
		10 mg/m3	Total dust.
Slovakia. OELs. Regulatio	n No. 300/2007 concerning protection of	f health in work with chemi	cal agents
Additional components	Туре	Value	Form
Dust	TWA	10 mg/m3	Dust.
Slovenia OELs Regulatio	ns concerning protection of workers ag	ainst risks due to exposure	a to chemicals while wor
(Official Gazette of the Re			e to chemicais while wor
Additional components	Туре	Value	Form
Dust	TWA	10 mg/m3	Inhalable fraction.
		1,25 mg/m3	Respirable fraction.
Spain. Occupational Expo	sure Limits		
Additional components	Туре	Value	Form
Dust	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Inhalable fraction.
Switzerland. SUVA Grenzy	verte am Arbeitsplatz		
Additional components	Туре	Value	Form
Dust	TWA	3 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
UK. EH40 Workplace Expo	osure Limits (WELs)	-	
Additional components	Туре	Value	Form
 Dust	TWA	4 mg/m3	Respirable dust.
		10 mg/m3	Inhalable dust.
ogiaal limit valuaa	No biological exposure limits poted for	-	
ogical limit values ommended monitoring	No biological exposure limits noted for Follow standard monitoring procedures	,	
cedures	- Show standard monitoring procedures		
ved no effect levels ELs)	Not available.		
dicted no effect centrations (PNECs)	Not available.		
Exposure controls			

Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.		
Eye/face protection	Wear safety glasses with side shields (or goggles).		
Skin protection			
- Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.		
- Other	Wear suitable protective clothing.		
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.		
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.		
Hygiene measures	When using, do not eat, drink or smoke. 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. Eye wash fountain and emergency showers are recommended.		
Environmental exposure controls	Environmental manager must be informed of all major releases. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.		

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

5.1. Information on basic physic	ai and chemical properties
Physical state	Solid.
Form	Granular.
Colour	Amber.
Odour	Mild.
Melting point/freezing point	Not available.
Boiling point or initial boiling point and boiling range	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Flash point	> 93,9 °C (> 201,0 °F) Cleveland open cup
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
рН	Not available.
Solubility(ies)	
Solubility (water)	< 0,1 % at 25°C
Partition coefficient (n-octanol/water)	Not available.
Vapour pressure	< 0,001 mm Hg at 20°C
Vapour density	Not available.
Relative density	0,97 at 25°C/25°C (water=1)
Particle characteristics	Not available.
Other safety characteristics	
Chemical family	Polyamide resin
Density	970,00 kg/m3
Evaporation rate	0 n-BuAc=1 estimated
Percent volatile	0 % by weight estimated
Softening point	128 °C (262,4 °F) Ring & Ball
Weighted solids	100 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport
10.2. Chemical stability	Material is stable under normal conditions.

10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.		
10.4. Conditions to avoid	Strong oxidising agents. Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimise dust generation and accumulation.		
10.5. Incompatible materials	Strong oxidising agents.		
10.6. Hazardous decomposition products	Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.		
SECTION 11: Toxicologica	al information		
General information	Not available.		
Information on likely routes of e	exposure		
Inhalation	Dust may irritate respiratory system.		
Skin contact	No adverse effects due to skin contact are expecte	d.	
Eye contact	Direct contact with eyes may cause temporary irrita	tion.	
Ingestion	May cause discomfort if swallowed. However, inges occupational exposure.	stion is not likely to be a primary route of	
Symptoms	Dusts may irritate the respiratory tract, skin and eye	es.	
11.1. Information on toxicologic	al effects		
Acute toxicity	Based on available data, the classification criteria a	are not met.	
Components	Species	Test Results	
Polyamide resin			
<u>Acute</u> Oral			
LD50	Rat	> 5000 mg/kg, 14 days At this dose no death occurred.;Data is for similar product.; OECD 401	
* Estimates for product may b	e based on additional component data not shown.		
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritat	ion.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irrita	tion.	
Respiratory sensitisation	Not available.		
Skin sensitisation	This product is not expected to cause skin sensitisa	ation.	
Sensitisation Polyamide resin	Buehler Test, Not a product.; Result: Negative Species: Guinea pig Organ: Skin	skin sensitizer.; Data is for similar	
Germ cell mutagenicity	No data available to indicate product or any compo carcinogenic.	nents present at greater than 0.1% are	
Carcinogenicity	This product is not considered to be a carcinogen b	by IARC, ACGIH, NTP, or OSHA.	
Hungary. 26/2000 EüM Ordin (as amended) Not listed.	nance on protection against and preventing risk r	elating to exposure to carcinogens at work	
Reproductive toxicity	This product is not expected to cause reproductive	or developmental effects.	
Specific target organ toxicity - single exposure	Not available.		
Specific target organ toxicity - repeated exposure	Not available.		
Aspiration hazard	Not available.		
Mixture versus substance information	No information available.		
11.2. Information on other hazar			
Endocrine disrupting properties	The product does not contain components conside according to REACH Article 57(f) or regulation (EU 2018/605 at levels of 0.1% or higher.		
Other information	Not available.		

SECTION 12: Ecological information

12.1. Toxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Polyamide resin			
Acute			
	EC50	Bacteria (Pseudomonas putida)	> 1000 mg/l, 16 hr >> Water solubility; Data is for similar product.;
Aquatic			
Crustacea	NOEC	Water flea (Daphnia magna)	> 1000 mg/l, 48 hr Data is for similar product.; OECD 202;
Acute			
Crustacea	EL50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hr >> Water solubility; Data is for similar product.; OECD 202;

* Estimates for product may be based on additional component data not shown.

12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.
12.6. Endocrine disrupting properties	The product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
12.7. 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

13.1. Waste treatment methods	
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 (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

AUN		
14.1. UN number	Not available.	
14.2. UN proper shipping	Not available.	
name		
14.3. Transport hazard class(es)		
Class	Not available.	
Subsidiary risk	-	
Hazard No. (ADR)	Not available.	
Tunnel restriction code	Not available.	
14.4. Packing group	Not available.	
14.5. Environmental hazards	No.	
14.6. Special precautions	Not available.	
for user		
RID		
14.1. UN number	Not available.	
14.2. UN proper shipping	Not available.	
name		

14.3. Transport hazard class(es) Class Not available. Subsidiary risk 14.4. Packing group Not available. 14.5. Environmental hazards No. Not available. 14.6. Special precautions for user Not available. 14.1. UN number 14.2. UN proper shipping Not available. name 14.3. Transport hazard class(es) Class Not available. Subsidiary risk Not available. 14.4. Packing group 14.5. Environmental hazards No. 14.6. Special precautions Not available. for user ΙΑΤΑ 14.1. UN number Not available. 14.2. UN proper shipping Not available. name 14.3. Transport hazard class(es) Not available. Class Subsidiary risk Not available. 14.4. Packing group 14.5. Environmental hazards No. Not available. 14.6. Special precautions for user IMDG Not available. 14.1. UN number 14.2. UN proper shipping Not available. name 14.3. Transport hazard class(es) Not available. Class Subsidiary risk Not available. 14.4. Packing group 14.5. Environmental hazards Marine pollutant No. Not available. EmS Not available. 14.6. Special precautions for user 14.7. Transport in bulk Not applicable. according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

- Not listed.
- Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations	This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended.
National regulations	Follow national regulation for work with chemical agents.
15.2. Chemical safety assessment	No Chemical Safety Assessment has been carried out.
Water hazard class AwSV	Non-hazardous to water

SECTION 16: Other information

List of abbreviations References Information on evaluation method leading to the classification of mixture	Not available. Not available. Not applicable.
Full text of any H-statements not written out in full under Sections 2 to 15	None.
Revision information	SECTION 2: Hazards identification: 2,3. Other hazards SECTION 8: Exposure controls/personal protection: Environmental exposure controls SECTION 11: Toxicological information: Endocrine disrupting properties SECTION 12: Ecological information: 12,6. Endocrine disrupting properties SECTION 12: Ecological information: 12,5. Results of PBT and vPvB assessment SECTION 16: Other information: Disclaimer HazReg Data: Europe - EU
Training information	Follow training instructions when handling this material.

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