

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

### 1.1. Product identifier

<b>Name of the substance</b>	Monomer acid
<b>Trade name of the substance</b>	CENTURY™ D1
<b>Identification number</b>	273-295-9 (EC number)
<b>Registration number</b>	01-2119493909-16-0001
<b>Synonyms</b>	None.
<b>SDS number</b>	8930
<b>Product code</b>	200000000536
<b>Issue date</b>	12-December-2016
<b>Version number</b>	3,0
<b>Revision date</b>	01-November-2022
<b>Supersedes date</b>	30-November-2020

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

<b>Identified uses</b>	Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation [mixing] of preparations and/or re-packaging (excluding alloys).
<b>Uses advised against</b>	None known.

### 1.3. Details of the supplier of the safety data sheet

<b>Company name</b>	Kraton Chemical B.V.
<b>Address</b>	Transistorstraat 16, 1322 CE Almere, The Netherlands
<b>Phone</b>	+31 36 546 2800
<b>Email address</b>	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** After prolonged contact with highly porous materials, this product may spontaneously combust.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

<b>Contains:</b>	Monomer acid
<b>Hazard pictograms</b>	None.
<b>Signal word</b>	None.
<b>Hazard statements</b>	The substance does not meet the criteria for classification.

#### Precautionary statements

<b>Prevention</b>	Observe good industrial hygiene practices.
<b>Response</b>	Wash hands after handling.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information** None.

### 2.3. Other hazards

After prolonged contact with highly porous materials, this product may spontaneously combust. 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.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Monomer acid	100	68955-98-6 273-295-9	01-2119493909-16-0001 01-2119493909-16-0002	-	

Classification: -

#### List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

## SECTION 4: First aid measures

**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 measures

**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** 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** Exposure may cause temporary irritation, redness, or discomfort.

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

## SECTION 5: Firefighting measures

**General fire hazards** Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**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** 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 equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** Wear suitable protective equipment. Move 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 release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Wear appropriate personal protective equipment.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

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

**6.3. Methods and material for containment and cleaning up** Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

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

Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. May auto-oxidize with sufficient heat generation to ignite if spread (as a thin film) or absorbed on porous or fibrous material. Contaminated rags and cloths must be put in fireproof containers for disposal. 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 incompatibilities

Do not store in direct sunlight. Store in original tightly closed container. Keep containers closed when not in use. 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

No exposure limits noted for ingredient(s).

##### Biological limit values

No biological exposure limits noted for the ingredient(s).

##### Recommended monitoring procedures

Follow standard monitoring procedures.

##### Derived no effect levels (DNELs)

Not available.

##### Predicted no effect concentrations (PNECs)

Not available.

#### 8.2. Exposure controls

##### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) 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.

##### Individual protection measures, such as personal protective equipment

###### General information

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

In case of insufficient ventilation, wear suitable respiratory equipment.

###### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

##### 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. 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

##### Physical state

Liquid.

##### Form

Semi-solid to liquid

##### Colour

Light yellow

##### Odour

Fatty Acid

##### Melting point/freezing point

35 °C (95 °F) Titer

##### Boiling point or initial boiling point and boiling range

> 200 °C (> 392 °F)

##### Flammability (solid, gas)

Not available.

##### Upper/lower flammability or explosive limits

###### Flammability limit - lower (%)

Not available.

###### Flammability limit - upper (%)

Not available.

<b>Flash point</b>	180,0 °C (356,0 °F) Cleveland open cup
<b>Auto-ignition temperature</b>	350 °C (662 °F) Data is for similar product.
<b>Decomposition temperature</b>	Not available.
<b>pH</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	15 mg/l at 20°C; Data is for similar product.
<b>Partition coefficient (n-octanol/water)</b>	4,9 at 25°C; Data is for similar product.
<b>Vapour pressure</b>	< 0,001 mm Hg at 20°C
<b>Vapour density</b>	Not available.
<b>Relative density</b>	0,9 at 25°C/25°C (water=1)
<b>Particle characteristics</b>	Not available.
<b>Other safety characteristics</b>	
<b>Density</b>	900,00 kg/m <sup>3</sup> at 20°C
<b>Evaporation rate</b>	0 (n-BuAc=1) estimated
<b>Percent volatile</b>	0 % by weight estimated
<b>Viscosity</b>	35 cSt at 40°C
<b>Weighted solids</b>	100 %

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Strong oxidising agents. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.
<b>10.5. Incompatible materials</b>	Strong oxidising agents.
<b>10.6. Hazardous decomposition products</b>	Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

## SECTION 11: Toxicological information

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Monomer acid</b>	Irritation Corrosion - Eye, No eye irritation.; Data is for similar product.; OECD 405 Result: Negative Species: New Zealand white rabbit Observation Period: 72 hr
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms** Not available.

### 11.1. Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Monomer acid (CAS 68955-98-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
	Wistar rat	> 2000 mg/kg, 14 days Data is for similar product.; OECD 401
NOAEL	Sprague-Dawley rat	4000 mg/kg/day, 13 wk No toxicity to reproduction.; Data is for similar product.; OECD 416

Components	Species	Test Results
<b>Subacute</b> <b>Oral</b> NOAEL	Sprague-Dawley rat	741 mg/kg/day, 13 wk Data is for similar product.; OECD 408

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

<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.	
<b>Corrosivity</b> Monomer acid		Irritation Corrosion - Skin, No skin irritation.; Data is for similar product.; OECD 404 Result: Negative Species: New Zealand white rabbit Test Duration: 4 hr
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.	
<b>Eye contact</b> Monomer acid		Irritation Corrosion - Eye, No eye irritation.; Data is for similar product.; OECD 405 Result: Negative Species: New Zealand white rabbit Observation Period: 72 hr
<b>Respiratory sensitisation</b>	Not available.	
<b>Skin sensitisation</b>	This product is not expected to cause skin sensitisation.	
<b>Skin Sensitisation</b> Monomer acid		Maximisation assay (Magnusson and Kligman), Not a skin sensitizer.; Data is for similar product.; OECD 406 Result: Negative Species: Guinea pig
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are carcinogenic.	
<b>Mutagenicity</b> Monomer acid		Germ Cell Mutagenicity: Ames, Not mutagenic in Ames Test.; Data is for similar product.; OECD 471; Result: Negative Species: Salmonella typhimurium In Vitro Mammalian Cell Gene Mutation, This material is considered to be non-clastogenic to human lymphocytes in vitro.; Data is for similar product.; OECD 473 Result: Negative Species: Human
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>Hungary. 26/2000 EüM Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)</b> Not listed.		
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not available.	
<b>Mixture versus substance information</b>	No information available.	
<b>11.2. Information on other hazards</b>		
<b>Endocrine disrupting properties</b>	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.	
<b>Other information</b>	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
Monomer acid (CAS 68955-98-6)	EC50 Bacteria ( <i>Pseudomonas putida</i> )	> 10000 mg/l

Components		Species	Test Results
	EL50	Green algae ( <i>Scenedesmus subspicatus</i> )	> 1000 mg/l, 24 hr OECD 201 > 1000 mg/l, 72 hr OECD 201
<i>Chronic</i>			
	NOEC	Earthworm	> 1000 mg/kg, 8 wk OECD 222
<b>Aquatic</b>			
Crustacea	EL50	Water flea ( <i>Daphnia magna</i> )	> 1000 mg/l, 48 hr OECD 202
Fish	LL50	Ide, silver or golden orfe ( <i>Leuciscus idus</i> )	> 1000 mg/l, 96 hr OECD 203
<i>Chronic</i>			
Crustacea	NOEL	<i>Daphnia magna</i>	> 5 mg/l, 21 days OECD 211

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

**12.2. Persistence and degradability** The product is expected to be biodegradable.

**Biodegradability**

**Percent Degradation (Aerobic Biodegradation)**

Monomer acid

67 % OECD 301 B  
Result: Readily biodegradable  
Species: Activated sewage sludge  
Test Duration: 28 day

**12.3. Bioaccumulative potential**

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

CENTURY™ D1

4,9 LogKow, at 25°C; Data is for similar product.

**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.

**Special precautions**

Dispose in accordance with all applicable regulations.

**SECTION 14: Transport information**

**ADR**

**14.1. UN number** Not available.

**14.2. UN proper shipping name** Not available.

**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 for user** Not available.

**RID**

**14.1. UN number** Not available.

14.2. UN proper shipping name Not available.

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions for user Not available.

ADN

14.1. UN number Not available.

14.2. UN proper shipping name Not available.

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions for user Not available.

IATA

14.1. UN number Not available.

14.2. UN proper shipping name Not available.

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions for user Not available.

IMDG

14.1. UN number Not available.

14.2. UN proper shipping name Not available.

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards

Marine pollutant No.

EmS Not available.

14.6. Special precautions for user Not available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Transport in bulk 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**

A Chemical Safety Assessment has been carried out for this substance.

**Water hazard class**

**AwSV**

WGK1

**SECTION 16: Other information**

**List of abbreviations**

Not available.

**References**

Not available.

**Information on evaluation method leading to the classification of mixture**

Not applicable.

**Full text of any H-statements not written out in full under Sections 2 to 15**

None.

**Revision information**

This document has undergone significant changes and should be reviewed in its entirety.

**Training information**

Follow training instructions when handling this material.



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