

MSDS- VogaPU crete40

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VOGEL SYSTEMS Safety data sheet

Date /Revised: 19.09.2022

Product: **MSDS- VogaPU crete40**

Version: 1.0

Date of print 20.09.2022

1. Identification

Product identifier

VogaPU crete40

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

Relevant identified uses: Product for construction chemicals Recommended use: for industrial and professional users



Details of the supplier of the safety data sheet

E-mail address: info@vogel-systems.de

Emergency telephone number

International emergency number

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**1. Product identifier**Product name **VogaPU crete40****2. Relevant identified uses of the substance or mixture and uses advised against**Identified uses : **Heavy-Duty Polyurethane Flooring System**Details of the supplier of the safety data sheetSupplier

Company name : Vogel co.

E-mail address: info@vogel-systems.de**2. COMPOSITION/INFORMATION ON INGREDIENTS****GHS Classification:****Flammable Liquid** – Category 3**Skin Irritation** – Category 2**Eye Irritation** – Category 2A**Respiratory Sensitization** – Category 1**Specific Target Organ Toxicity – Single Exposure (STOT SE)** – Category 3 (respiratory tract)**Signal Word:** ☐ ☐ **Danger****Hazard Statements:****H226:** Flammable liquid and vapor**H315:** Causes skin irritation**H319:** Causes serious eye irritation**H334:** May cause allergy or asthma symptoms or breathing difficulties if inhaled**H335:** May cause respiratory irritation**H317:** May cause an allergic skin reaction**Precautionary Statements:****P210:** Keep away from heat/sparks/open flames – No smoking**P261:** Avoid breathing vapors/mist/spray**P280:** Wear protective gloves, eye protection, and face protection**P271:** Use only outdoors or in a well-ventilated area**P305 + P351 + P338:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing**P302 + P352:** IF ON SKIN: Wash with plenty of water**P304 + P340:** IF INHALED: Remove person to fresh air and keep comfortable for breathing**P333 + P313:** If skin irritation or rash occurs: Get medical advice/attention**P337 + P313:** If eye irritation persists: Get medical advice/attention**P501:** Dispose of contents/container in accordance with local regulations**Other Hazards:**

May form explosive vapor-air mixtures in confined areas

Prolonged or repeated exposure to isocyanates can cause **respiratory sensitization**

Cured product is inert, but uncured resins and hardeners must be handled with care

3. COMPOSITION**Component A (Polyol Base)**

Substance	CAS Number	% by Weight	Classification (GHS)
Polyurethane Polyol	Proprietary	%60–40	Not classified
Xylene (solvent)	7-20-1330	%5>	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, STOT SE 3
Additives and Pigments	Various	Balance	May include irritants or sensitizers

Component B (Isocyanate Hardener)

Substance	CAS Number	% by Weight	Classification (GHS)
Aliphatic/Modified MDI Isocyanate	Proprietary	%40–20	Resp. Sens. 1, Skin Sens. 1, Eye Irrit. 2A, STOT SE 3
Solvent Naphtha (light aromatic)	6-95-64742	%10>	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1

Component C – Aggregate or Quartz Filler

Substance	CAS Number	% by Weight	Classification
Silica (Quartz Sand)	7-60-14808	%30–10	Not classified (in non-respirable form)

4. FIRST AID MEASURES**• Inhalation:**

Remove person to **fresh air immediately**.

Keep at rest in a position comfortable for breathing.

If breathing is difficult or irritation persists, **seek medical attention**.

• Skin Contact:

Remove contaminated clothing and footwear.

Wash skin thoroughly with **soap and water** for at least 15 minutes.

Do **not** use solvents or thinners.

• Eye Contact:

Rinse cautiously with **clean water** for at least **15 minutes**, holding eyelids open.

Remove contact lenses if present and easy to do.

Continue rinsing and **seek immediate medical attention**.

• Ingestion:

Rinse mouth thoroughly.

Do **not induce vomiting**.

Seek immediate medical attention and provide product label or SDS if possible.

• Most Important Symptoms and Effects (Acute and Delayed):

• **Skin contact:** Redness, itching, rash, possible allergic reaction

• **Eye contact:** Burning, redness, tearing

• **Inhalation:** Coughing, shortness of breath, dizziness, possible respiratory sensitization

• **Delayed effects:** Inhalation of isocyanates may cause asthma-like symptoms even hours after exposure

• Advice for Medical Personnel:

Treat symptomatically.

Observe for **delayed onset respiratory symptoms**, especially after inhalation of isocyanate vapors.

5. FIRE FIGHTING MEASURES**Suitable Extinguishing Media:**

- **Foam** (alcohol-resistant preferred)
- **Dry chemical powder**
- **Carbon dioxide (CO₂)**
- **Water spray** (for cooling only—not to extinguish flammable liquid fires directly)

Unsuitable Extinguishing Media:

- **Direct water jets** – may spread burning material or cause splattering

Specific Hazards Arising from the Product:

- Flammable liquid and vapor (especially in Components A & B)
- Heating or fire may cause pressure build-up in closed containers with **risk of explosion**

Hazardous combustion by-products may include:

Carbon monoxide (CO)
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
Hydrogen cyanide (HCN)
Isocyanate vapors
Other irritating or toxic organic vapors

Firefighting Instructions:

- Evacuate area and fight fire from a **safe distance and upwind**.
- Cool exposed containers with **water spray** to prevent rupture.
- Prevent runoff from entering **drains or watercourses**.
- Use **non-sparking tools** and **explosion-proof equipment** during emergency response.

Protective Equipment for Firefighters:

- Wear full **fire-resistant turnout gear** and **self-contained breathing apparatus (SCBA)** with face mask.
- Isocyanate vapors require **special respiratory protection** – avoid inhalation of smoke or fumes at all costs.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment, and Emergency Procedures:**

- Evacuate non-essential personnel from the area.
- Eliminate all **sources of ignition** — no smoking, open flames, or sparks.
- Avoid breathing vapors or mists.
- Wear appropriate **PPE**:
 - Chemical-resistant gloves
 - Eye protection (goggles or face shield)
 - Long sleeves or coveralls
 - Respiratory protection if needed (organic vapor respirator)

Environmental Precautions:

- Prevent product from entering **sewers, drains, or watercourses**.
- In case of significant environmental release, notify appropriate local or national authorities.

Methods and Materials for Containment and Cleaning Up:

- **Stop the Leak (If Safe):**
 - Turn off flow or seal the source of the leak.
- **Contain the Spill:**
 - Dike or contain the area with non-combustible, inert materials (e.g., sand, earth).
- **Absorb and Collect:**
 - Use absorbents such as vermiculite, sand, or diatomaceous earth.
 - Scoop the absorbed material into **properly labeled containers** for disposal.
- **Decontamination:**
 - Clean the spill area with **detergent and water** after initial collection.
 - Do **not** use solvents, especially on isocyanate residues (Part B).
- Refer to **Section 13** for complete disposal guidance.

7. HANDLING AND STORAGE**Precautions for Safe Handling:**

- Use **only in well-ventilated areas**.
- Avoid **inhalation of vapors or spray**, and **contact with skin and eyes**.
- Wear appropriate **personal protective equipment (PPE)** at all times.
- Do not eat, drink, or smoke while handling the product.
- Use **non-sparking tools** and ensure all equipment is properly grounded to prevent static discharge.
- **Do not mix components (A & B)** until ready to use. Follow mix ratios carefully.
- Handle Component B (isocyanate) with particular caution – avoid contact with **moisture**, which can cause dangerous reactions.

Conditions for Safe Storage (Including Incompatibilities):

- Store in tightly **sealed original containers**, upright and clearly labeled.
- Keep away from **heat sources, open flames, direct sunlight, and sparks**.

Storage Temperature Range: +5°C to +35°C

- Avoid temperature extremes that may degrade the product.

Protect From:

- **Moisture and humidity** (especially Part B – isocyanate component)
- **Strong acids, bases, oxidizers, and amines**
- Freezing temperatures or excessive heat

Other Storage Notes:

- Keep components **separated** until use.
- Do not store near food, beverages, or animal feed.
- Ensure storage area has **adequate ventilation** and appropriate **spill containment** measures.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Substance	CAS No.	OSHA PEL
Xylene	7-20-1330	100 ppm (TWA)
Ethylbenzene (if present)	4-41-100	100 ppm (TWA)
Polymeric Isocyanates	Proprietary	Not established

Engineering Controls:

- Provide **local exhaust ventilation** to maintain exposure below applicable limits.
- Ensure **mechanical ventilation** is used in confined or enclosed areas.
- Install **eyewash stations** and **emergency showers** near work zones.

Personal Protective Equipment (PPE):

- **Respiratory Protection:**
 - Use a NIOSH-approved **organic vapor respirator** if exposure levels exceed limits or if ventilation is inadequate.
 - Use **air-supplied or full-face respirator** for high-exposure applications or spray work involving isocyanates.
- **Eye/Face Protection:**
 - Wear **chemical splash goggles** or a **face shield** where splashing is likely.
- **Skin Protection:**
 - Wear **chemical-resistant gloves** (e.g., nitrile, butyl rubber).
 - Use long sleeves, **coveralls**, and chemical-resistant footwear.
- **Hygiene Measures:**
 - Wash hands and face thoroughly after handling.
 - Do not reuse contaminated clothing until thoroughly cleaned.
 - Remove PPE before eating, drinking, or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Multi-component system: pigmented resin (Part A), clear/yellow hardener (Part B), granular aggregate (Part C)
Odor	Mild chemical/solvent odor
Odor Threshold	Not determined
pH	Not applicable (non-aqueous system)
Melting/Freezing Point	Not determined
Boiling Point/Range	>100°C (varies by solvent)
Flash Point	>30°C (Closed cup)
Evaporation Rate	Slower than butyl acetate
Flammability (liquid/gas)	Flammable liquid and vapor (Part A & B)
Upper/Lower Flammability Limits	Not determined
Vapor Pressure	Low (dependent on solvent content)
Vapor Density	Heavier than air
Relative Density (mixed)	1.6 – 2.0 g/cm ³
Solubility in Water	Insoluble when cured; partial reactivity with water (Part B)
Partition Coefficient (n-octanol/water)	Not determined
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Viscosity	High (thick liquid or paste before curing)
VOC Content	<100 g/L (low-VOC formulation)

10. STABILITY AND REACTIVITY**Reactivity:**

- **Component B (isocyanate)** is reactive with **water**, **amines**, and **alcohols**, releasing **carbon dioxide (CO₂)** gas, which may cause **pressure buildup** in sealed containers.
- Components A and B will **cure upon mixing**, initiating an exothermic chemical reaction.

Chemical Stability:

- **Stable** under recommended handling and storage conditions (cool, dry, and well-ventilated).
- Stability decreases when exposed to **moisture**, **heat**, or **UV light** prior to curing.

Possibility of Hazardous Reactions:

- May occur if Components A and B are **mixed incorrectly** or contaminated with moisture.
- Curing mixture may **generate heat**, particularly in large volumes.

Conditions to Avoid:

- Heat, flames, sparks, and static discharge
- Moisture and humidity (especially for Part B)
- Incompatible materials (see below)

Incompatible Materials:

- Water (may react with isocyanate)
- Strong acids or bases
- Amines and alcohols
- Oxidizing agents

Hazardous Decomposition Products (if burned or decomposed):**Carbon monoxide (CO)****Carbon dioxide (CO₂)****Hydrogen cyanide (HCN)****Nitrogen oxides (NO_x)****Isocyanate vapors****Other toxic organic vapors****11. TOXICOLOGICAL INFORMATION****Likely Routes of Exposure:****Inhalation** of vapors or aerosols during application**Skin contact** with liquid components**Eye contact** from splashes or fumes**Ingestion** (accidental, unlikely in industrial use)**Acute Toxicity:****Inhalation:**Vapors may cause **respiratory tract irritation**, dizziness, headache, or nausea.Isocyanates (Part B) may cause **asthma-like symptoms** and **respiratory sensitization**.**Skin Contact:**May cause **irritation** (redness, dryness, itching).Component B may cause **allergic skin reactions** in sensitized individuals.**Eye Contact:**Causes **moderate to severe eye irritation**. Symptoms may include burning, tearing, and redness.**Ingestion:**

Harmful if swallowed. May cause irritation to the gastrointestinal tract.

Skin Corrosion/Irritation:**Category 2:** Causes irritation with prolonged or repeated contact.**Serious Eye Damage/Irritation:****Category 2A:** May cause significant eye discomfort or injury.**Respiratory or Skin Sensitization:****Category 1 (Skin and Respiratory):**Repeated exposure to isocyanates can lead to **permanent respiratory sensitization** (e.g., asthma).

Skin sensitization may result in allergic dermatitis.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

- **Uncured product** (especially solvents and isocyanates) is **toxic to aquatic life**, including fish and invertebrates.
- Solvent runoff may cause **oxygen depletion** in water systems.
- Do not discharge into drains, surface waters, or soil.

Persistence and Degradability:

- The **polyurethane system is not readily biodegradable**.
- Once cured, it forms an **inert solid**, highly resistant to chemical or biological breakdown.

Bioaccumulative Potential:

- Solvent components (e.g., xylene, ethylbenzene) may have **moderate bioaccumulation potential** in aquatic organisms.
- **Cured product** is not expected to bioaccumulate.

Mobility in Soil:

- **Uncured liquid** can infiltrate soil and contaminate groundwater.
- **Cured material** is considered **immobile** and chemically stable in the environment.

Other Adverse Effects:

- No data suggesting ozone depletion or global warming potential.
- Environmental impact is **minimal if used and disposed of properly**.

13. DISPOSAL CONSIDERATIONS**Product Disposal (Uncured):**

- Treat uncured material as **hazardous waste**.
- **Do not dispose of into drains, sewers, or the environment.**

Collect excess liquid into **properly labeled, sealed containers**.

- Incineration by a licensed chemical waste disposal facility is the **preferred method**.

Product Disposal (Cured):

- Fully cured material becomes **chemically inert and non-hazardous**.

May be disposed of as **construction or industrial solid waste**, in accordance with local regulations.

- Break into manageable pieces if necessary for landfill acceptance.

Container Disposal:

- **Do not reuse empty containers.**
- Containers may contain hazardous residues.
- Triple rinse (if permitted) and puncture, or dispose of according to local hazardous waste guidelines.
- Consider all contaminated packaging and cleaning materials as **hazardous**.

14. TRANSPORT INFORMATION

Parameter	Details
UN Number	1263
Proper Shipping Name	Paint or Paint Related Material
Transport Hazard Class	3 – Flammable Liquid
Packing Group	III – Minor danger
Marine Pollutant	No, unless specified by formulation

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Road/Rail Transport (ADR/RID):

- UN 1263, Class 3, PG III
- Tunnel Code: D/E
- Label: **Flammable Liquid**

Sea Transport (IMDG):

- UN 1263, Class 3, PG III
- EmS Code: F-E, S-E
- Stowage Category: A
- Not regulated as a marine pollutant unless formulation includes hazardous pigments or solvents

Air Transport (IATA/ICAO):

- UN 1263, Class 3, PG III
- Must follow packaging instructions for flammable liquids (Packing Instruction 355)
- Allowed on both passenger and cargo aircraft (check quantity limits)

Special Precautions for Transport:

- Keep containers **sealed and upright** during transport.
- Protect from **physical damage, heat, and moisture**.
- Ensure compliance with all applicable local and international transport regulations.
- **Segregate from oxidizers**, acids, and food items.

15. Regulatory Information**U.S. Regulations:****OSHA Hazard Communication Standard (29 CFR 1910.1200):**

This product is classified as **hazardous** – includes flammable liquid, irritant, and sensitizing components.

SARA Title III – Emergency Planning and Community Right-to-Know Act:

Section 311/312: Fire hazard, immediate (acute) health hazard, delayed (chronic) health hazard

Section 313:

Contains **xylene (CAS 1330-20-7)** and possibly **ethylbenzene (CAS 100-41-4)**

May require **reporting** if concentration exceeds 1%

European Union (EU):**REACH Regulation (EC 1907/2006):**

All ingredients are either **registered, pre-registered, or exempt**.

No intentionally added **SVHCs** (Substances of Very High Concern) present.

CLP Regulation (EC 1272/2008):

Product is classified according to the **Globally Harmonized System (GHS)**.

Complies with all CLP labelling and hazard communication requirements.

Canada (WHMIS 2015 / HPR):

Product is **classified as hazardous** under Canadian HPR.

Requires **bilingual SDS** and workplace labeling.

Other Global Inventories:

All ingredients are compliant with national inventories or regulations in:

Australia (AICS)

China (IECSC)

Japan (ENCS/ISHL)

Korea (KECI)

Philippines (PICCS)

16. OTHER INFORMATION

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.