1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier

Product Name: CARBOTHANE 133 VOC PART A

Revision Date: 09/28/2018

Supercedes Date: 06/17/2015

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

Component of multicomponent industrial coatings - Industrial use.

1.3 Details of the supplier of the safety data sheet

Manufacturer:

Carboline Company
2150 Schuetz Road
St. Louis, MO USA 63146

Regulatory / Technical Information:
Contact Carboline Technical Services at 1-800-848-4645

Datasheet Produced by:
Schlereth, Ken - ehs@stoncor.com

1.4 Emergency telephone number:

CHEMTREC 1-800-424-9300 (Inside US)
CHEMTREC +1 703 5273887 (Outside US)
HEALTH - Pittsburgh Poison Control 1-412-681-6669

2. Hazard Identification

2.1 Classification of the substance or mixture

Carcinogenicity, category 1A
Eye Irritation, category 2
Flammable Liquid, category 2
STOT, repeated exposure, category 1
Skin Irritation, category 2
Skin Sensitizer, category 1
2.2 Label elements

Symbol(s) of Product

Signal Word
danger

Named Chemicals on Label
PARACHLOROBENZO TRIFLUORIDE, MICROCRYSTALLINE SILICA

HAZARD STATEMENTS

<table>
<thead>
<tr>
<th>Hazard Statement</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid, category 2</td>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>Skin Irritation, category 2</td>
<td>H315</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Skin Sensitizer, category 1</td>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Eye Irritation, category 2</td>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Carcinogenicity, category 1A</td>
<td>H350-1A</td>
<td>May cause cancer.</td>
</tr>
<tr>
<td>STOT, repeated exposure, category 1</td>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

PRECAUTION PHRASES

<table>
<thead>
<tr>
<th>Precaution Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>P201</td>
<td>Obtain special instructions before use.</td>
</tr>
<tr>
<td>P202</td>
<td>Do not handle until all safety precautions have been read and understood.</td>
</tr>
<tr>
<td>P210</td>
<td>Keep away from heat/sparks/open flames/hot surfaces. - No smoking.</td>
</tr>
<tr>
<td>P235</td>
<td>Keep cool.</td>
</tr>
<tr>
<td>P260</td>
<td>Do not breathe dust/fume/gas/mist/vapours/spray.</td>
</tr>
<tr>
<td>P264</td>
<td>Wash hands thoroughly after handling.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
<tr>
<td>P284</td>
<td>Wear respiratory protection.</td>
</tr>
<tr>
<td>P302+352</td>
<td>IF ON SKIN: Wash with plenty of soap and water.</td>
</tr>
<tr>
<td>P305+351+338</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.</td>
</tr>
<tr>
<td>P308+313</td>
<td>IF exposed or concerned: Get medical advice/attention</td>
</tr>
<tr>
<td>P314</td>
<td>Get medical advice/attention if you feel unwell.</td>
</tr>
<tr>
<td>P333+313</td>
<td>If skin irritation or rash occurs: Get medical advice/attention.</td>
</tr>
<tr>
<td>P403+233</td>
<td>Store in a well-ventilated place. Keep container tightly closed.</td>
</tr>
</tbody>
</table>

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:
The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>14808-60-7</td>
<td>MICROCRYSTALLINE SILICA</td>
<td>50-75</td>
</tr>
</tbody>
</table>
4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11. When symptoms persist or in all cases of doubt seek medical advice.

5. Fire-fighting Measures

5.1 Extinguishing Media:
Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquid. Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashign back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. For personal protection see section 8.
6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING : Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection. Wash thoroughly after handling.

PROTECTION AND HYGIENE MEASURES : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Heat, flames and sparks.
STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>ACGIH Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICROCRYSTALLINE SILICA</td>
<td>14808-60-7</td>
<td>0.025 MGM3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>10 MGM3</td>
<td>10 MGM3</td>
<td>N/E</td>
</tr>
<tr>
<td>PARACHLOROBENZO TRIFLUORIDE</td>
<td>98-56-6</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>METHYL N-AMYL KETONE</td>
<td>110-43-0</td>
<td>50 PPM</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE</td>
<td>78-93-3</td>
<td>200 PPM</td>
<td>300 PPM</td>
<td>N/E</td>
</tr>
<tr>
<td>N-BUTYL ACETATE</td>
<td>123-86-4</td>
<td>50 PPM</td>
<td>150 PPM</td>
<td>N/E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MICROCRYSTALLINE SILICA</td>
<td>14808-60-7</td>
<td>0.1 MGM3</td>
<td>N/E</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-67-7</td>
<td>15.0 MG/M3</td>
<td>N/E</td>
</tr>
<tr>
<td>PARACHLOROBENZO TRIFLUORIDE</td>
<td>98-56-6</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>
8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

EYE PROTECTION: Ensure that eyewash stations and safety showers are close to the workstation location. Safety glasses with side-shields.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Impervious gloves. Request information on glove permeation properties from the glove supplier. Lightweight protective clothing

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Viscous Liquid, Various Colors
Physical State Liquid
Odor Solvent
Odor threshold N/D
pH N/D
Melting point / freezing point (°C) N/D
Boiling point/range 173 F (78 C) - 401 F (205 C)
Flash Point 71F (21C)
Evaporation rate Slower Than Ether
Flammability (solid, gas) Not determined
Upper/lower flammability or explosive limits 0.5 - 10.5
Vapour Pressure, mmHg N/D
Vapour density Heavier than Air
Relative density Not determined
Solubility in / Miscibility with water N/D
Partition coefficient: n-octanol/water Not determined
Auto-ignition temperature (°C) Not determined
Decomposition temperature (°C)  Not determined
Viscosity  Unknown
Explosive properties  Not determined
Oxidising properties  Not determined

9.2 Other information
VOC Content g/l:  157
Specific Gravity (g/cm3)  app. 1.68

10. Stability and Reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerisation does not occur.

10.4 Conditions to avoid
Heat, flames and sparks.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects
Acute Toxicity:
Oral LD50:  N/D
Inhalation LC50:  N/D

Irritation:  Unknown
Corrosivity:  Unknown
Sensitization:  Unknown
Repeated dose toxicity:  Unknown
Carcinogenicity:  Unknown
Mutagenicity:  Unknown
Toxicity for reproduction:  Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested.
Data on individual components are tabulated below:
### 12. Ecological Information

#### 12.1 Toxicity:

- **EC50 48hr (Daphnia):** Unknown
- **IC50 72hr (Algae):** Unknown
- **LC50 96hr (fish):** Unknown

#### 12.2 Persistence and degradability: Unknown

#### 12.3 Bioaccumulative potential: Unknown

#### 12.4 Mobility in soil: Unknown

#### 12.5 Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

#### 12.6 Other adverse effects: Unknown

### Additional Information:

This product contains silica which is classified by IARC as a known human carcinogen (Group 1). Crystalline silica is known to cause silicosis. The classification(s) is/are relevant when exposed to these respirable substances in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.
13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1 UN number UN1263
14.2 UN proper shipping name Paint
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazards Unknown
14.6 Special precautions for user Unknown
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code Unknown

15. Regulatory Information

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

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category
This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:
Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

Sara Section 313:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name CAS-No.
No Sara 313 components exist in this product.

Toxic Substances Control Act:
All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

Chemical Name CAS-No.
No TSCA 12(b) components exist in this product.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:
The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name CAS-No.
NEPHELINE SYENITE 37244-96-5
ACRYLIC COPOLYMER TRADE SECRET
Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEPHELINE SYENITE</td>
<td>37244-96-5</td>
</tr>
<tr>
<td>ACRYLIC COPOLYMER</td>
<td>TRADE SECRET</td>
</tr>
<tr>
<td>COLOR PIGMENT</td>
<td>5567-15-7</td>
</tr>
<tr>
<td>POLYESTER POLYOL</td>
<td>TRADE SECRET</td>
</tr>
<tr>
<td>COLOR PIGMENT</td>
<td>15793-73-4</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -

* Canadian DSL:

  No Information

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225  Highly flammable liquid and vapour.
H226  Flammable liquid and vapour.
H302  Harmful if swallowed.
H315  Causes skin irritation.
H317  May cause an allergic skin reaction.
H319  Causes serious eye irritation.
H332  Harmful if inhaled.
H335  May cause respiratory irritation.
H336  May cause drowsiness or dizziness.
H350  May cause cancer.
H372  Causes damage to organs through prolonged or repeated exposure.

Reasons for revision

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.