SAFETY DATA SHEET

1. Identification

Product identifier DEVCON® Ceramic Repair Putty Hardener

Other means of identification

SKU# 5333N

Recommended use Not available. **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Company name ITW Performance Polymers

Address 35 Brownridge Rd

Unit 1

Halton Hills, ON L7G 0C6

Contact personCustomer ServiceTelephone number978-777-1100

Fax E-mail

Emergency telephone

number

800-424-9300

Supplier Not available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 4

Acute toxicity, dermal Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1
Sensitization, skin Category 1
Germ cell mutagenicity Category 2
Specific target organ toxicity following single Category 1

exposure

Specific target organ toxicity following

repeated exposure

Environmental hazards Not classified.

Label elements



Signal word Danger

Hazard statement Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. May cause an allergic

skin reaction. Causes serious eye damage. Suspected of causing genetic defects. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure.

Category 2

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapours. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Material name: DEVCON® Ceramic Repair Putty Hardener
5333N Version #: 07 Revision date: 01-August-2023 Issue date: 28-May-2019

Response IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. Rinse mouth. IF ON SKIN:

Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. If skin irritation or rash occurs: Get medical advice/attention. Take off

contaminated clothing and wash it before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental information

None.

Other hazards None known.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|------------|-----------|
| Formaldehyde, Oligomeric Reaction Products With Phenol And Triethylenetetramine | Formaldehyde, oligomeric reaction products with phenol and triethylenetetramine | 32610-77-8 | 50 - < 60 |
| Phenol | | 108-95-2 | 10 - < 20 |
| TRIETHYLENETETRAMINE | TETA | 112-24-3 | 10 - < 20 |
| Titanium dioxide | Titanium dioxide | 13463-67-7 | 3 - < 5 |
| Benzyl alcohol | | 100-51-6 | 1 - < 3 |
| Silica, amorphous | | 7631-86-9 | < 0.3 |
| Other components below reportable | levels | | 10 - < 20 |

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical

advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Get medical advice/attention if you feel unwell.

Most important

symptoms/effects, acute and

delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause

chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

ula Alco

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

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

Fire fighting equipment/instructions

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.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials 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. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapours. Do not get this material in contact with eyes. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

| US. ACGIH | Threshold | Limit | Values (| (TLV) |
|------------------|------------------|-------|----------|-------|
|------------------|------------------|-------|----------|-------|

| Components | Туре | Value | Form | |
|-----------------------------------|------|-----------|--------------------------------|--|
| Phenol (CAS 108-95-2) | TWA | 5 ppm | | |
| Titanium dioxide (CAS 13463-67-7) | TWA | 2.5 mg/m3 | Respirable finescale particles | |
| | | 0.2 mg/m3 | Respirable nanoscale particles | |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended

| Components | Туре | Value | Form |
|--------------------------------------|------|----------|-----------------------|
| Phenol (CAS 108-95-2) | TWA | 19 mg/m3 | |
| | | 5 ppm | |
| Silica, amorphous (CAS 7631-86-9) | TWA | 3 mg/m3 | Respirable particles. |
| | | 10 mg/m3 | Total |
| Titanium dioxide (CAS 13463-67-7) | TWA | 10 mg/m3 | |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Туре | Value | Form |
|--------------------------------------|------|----------|----------------------|
| Phenol (CAS 108-95-2) | TWA | 5 ppm | |
| Silica, amorphous (CAS 7631-86-9) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Total dust. |
| Titanium dioxide (CAS 13463-67-7) | TWA | 3 mg/m3 | Respirable fraction. |
| · | | 10 mg/m3 | Total dust. |

| Components | | Туре | Val | ue | Form |
|---|--------------------------|--------------------------------|---------------------------|------------|--------------------------------|
| Phenol (CAS 108-95-2) | | TWA | 5 p | pm | |
| Titanium dioxide (CAS 13463-67-7) | | TWA | 2.5 | mg/m3 | Respirable finescale particles |
| | | | 0.2 | mg/m3 | Respirable nanoscale particles |
| Canada. New Brunswick Ol Publication (New Brunswic | | | Based on the 1991 | and 1997 A | ACGIH TLVs and BEIs |
| Components | | Туре | Val | ue | Form |
| Phenol (CAS 108-95-2) | | TWA | 19 | mg/m3 | |
| | | | 5 p | pm | |
| Silica, amorphous (CAS 7631-86-9) | | TWA | 3 m | ng/m3 | Respirable. |
| | | | 10 | mg/m3 | Inhalable |
| Titanium dioxide (CAS 13463-67-7) | | TWA | 10 | mg/m3 | |
| Canada. Ontario OELs. (Co Components | | re to Biological or Cl Type | hemical Agents), a Val | | |
| Phenol (CAS 108-95-2) | | TWA | 5 p | pm | |
| Titanium dioxide (CAS 13463-67-7) | | TWA | 10 | mg/m3 | |
| TRIETHYLENETETRAMIN E (CAS 112-24-3) | | TWA | 3 m | ng/m3 | |
| | | | 0.5 | ppm | |
| Canada. Quebec OELs. (Mi Components | nistry of Labor - | Regulation respecti | ng occupational h Val | | afety), as amended Form |
| Phenol (CAS 108-95-2) | | TWA | 19 | mg/m3 | |
| | | | 5 p | pm | |
| Silica, amorphous (CAS 7631-86-9) | | TWA | 10 | mg/m3 | Total dust. |
| Titanium dioxide (CAS 13463-67-7) | | TWA | 10 | mg/m3 | Total dust. |
| Canada. Saskatchewan OE Components | Ls (Occupation | al Health and Safety Type | Regulations, 1996 Val | - | as amended Form |
| Phenol (CAS 108-95-2) | | 15 minute | 7.5 | ppm | |
| | | 8 hour | 5 p | pm | |
| Silica, amorphous (CAS 7631-86-9) | | 15 minute | 6 m | ng/m3 | Respirable fraction. |
| | | | 20 | mg/m3 | Inhalable fraction. |
| Titanium dioxide (CAS 13463-67-7) | | 15 minute | 20 | mg/m3 | |
| ogical limit values | | | | | |
| ACGIH Biological Exposure Components | e Indices (BEI) Value | Determinant | Specimen | Sampling | j Time |
| Phenol (CAS 108-95-2) | 250 mg/g | Phenol with hydrolysis | Creatinine in urine | * | |
| * - For sampling details, plea | se see the source | e document. | | | |
| | | | | | |
| osure guidelines | | | | | |

Can be absorbed through the skin.

Material name: DEVCON® Ceramic Repair Putty Hardener

Phenol (CAS 108-95-2)

SDS CANADA

Canada - Manitoba OELs: Skin designation

Phenol (CAS 108-95-2) Danger of cutaneous absorption

Canada - Ontario OELs: Skin designation

Phenol (CAS 108-95-2)

TRIETHYLENETETRAMINE (CAS 112-24-3)

Can be absorbed through the skin.

Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Phenol (CAS 108-95-2) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Can be absorbed through the skin.

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Phenol (CAS 108-95-2) Danger of cutaneous absorption

Appropriate engineering

controls

Good general ventilation 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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Chemical respirator with organic vapour cartridge and full facepiece.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Chemical respirator with organic vapour cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Observe any medical surveillance requirements. Keep away from food and drink. 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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance Paste.
Physical state Liquid.
Form Paste.
Colour White.

Odour Mild. Phenolic.
Odour threshold Not available.
pH Not available.

Melting point/freezing point 12 °C (53.6 °F) estimated Initial boiling point and boiling 266 °C (510.8 °F) estimated

range

Flash point >93.3 °C (>199.9 °F)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit lower (%) 3 % estimated

Explosive limit - lower (%) 3 % estimated
Explosive limit – upper 10 % estimated

(%)

Vapour pressure 0.27 hPa estimated

Vapour density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 337.78 °C (640 °F) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density 1.20 g/cm3 estimated

Explosive properties Not explosive.

Flammability class Combustible IIIB estimated

Oxidising properties Not oxidising.

Specific gravity 1.2 estimated

VOC 0 q/l

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Acids. Strong oxidising agents. Aluminium. Peroxides. Phenols.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs by inhalation. Prolonged inhalation may be harmful.

Skin contact Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye damage.

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Harmful in contact with skin. Harmful if swallowed.

Components Species Test Results

Benzyl alcohol (CAS 100-51-6)

Acute Dermal

LD50 Rabbit 2000 mg/kg

Inhalation

LC50 Rat > 4.17799999999999 mg/l, 4 Hours

Silica, amorphous (CAS 7631-86-9)

Acute Oral

LD50 Rat > 22500 mg/kg

Titanium dioxide (CAS 13463-67-7)

<u>Acute</u>

Dermal

LD50 Hamster >= 10000 mg/kg

Oral

LD50 Rat > 10000 mg/kg

Material name: DEVCON® Ceramic Repair Putty Hardener
5333N Version #: 07 Revision date: 01-August-2023 Issue date: 28-May-2019

Components Species Test Results

TRIETHYLENETETRAMINE (CAS 112-24-3)

Acute Dermal Liquid

LD50 Rat 1465 mg/kg

Oral Liquid

LD50 Rat 1716 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye Causes serious eye damage.

irritation

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant

Silica, amorphous (CAS 7631-86-9) Irritant
Titanium dioxide (CAS 13463-67-7) Irritant

Respiratory sensitisation Not a respiratory sensitiser.

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity

ACGIH Carcinogens

Phenol (CAS 108-95-2)

A4 Not classifiable as a human carcinogen.

Titanium dioxide (CAS 13463-67-7)

A3 Confirmed animal carcinogen with unknown relevance to

humans.

Canada - Manitoba OELs: carcinogenicity

Phenol (CAS 108-95-2)

Not classifiable as a human carcinogen.

Titanium dioxide (CAS 13463-67-7)

Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Phenol (CAS 108-95-2)

3 Not classifiable as to carcinogenicity to humans.

Silica, amorphous (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.

Titanium dioxide (CAS 13463-67-7)

2B Possibly carcinogenic to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Causes damage to organs.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure.

12. Ecological information

EcotoxicityThe 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.

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Benzyl alcohol 1.1 Phenol 1.46

Mobility in soil No data available.

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.

13. Disposal considerations

Disposal instructions 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.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

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.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

the IBC Code

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not established.

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

Phenol (CAS 108-95-2)

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Industrial Chemicals (AICIS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |

Country(s) or region Inventory name On inventory (yes/no)*

Philippines Philippine Inventory of Chemicals and Chemical Substances Ye

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 28-May-2019
Revision date 01-August-2023

Version No. 07

Disclaimer ITW Performance Polymers cannot anticipate all conditions under which this information and its

product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance

for safe handling, use, processing, storage, transportation, disposal and release.

Revision information Physical & Chemical Properties: Multiple Properties

Material name: DEVCON® Ceramic Repair Putty Hardener
5333N Version #: 07 Revision date: 01-August-2023 Issue date: 28-May-2019