



SAFETY DATA SHEET

Issuing Date: 22-May-2015

Revision Date: 28-Sep-2016

Revision Number: 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: TS-1-G1

Product Name: HISOLIDS ABRASION RESISTANT
POLYURETHANE BAC-707 GRAY

Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Company Phone Number: 1-414-353-4200

Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-------------------|-------------|
| Carcinogenicity | Category 1A |
| Flammable Liquids | Category 2 |

Label Elements

Emergency Overview

DANGER

Hazard Statements
May cause cancer
Highly flammable liquid and vapor

Appearance Opaque **Physical state** Liquid **Odor** Solvent

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- Keep container tightly closed
- Ground/Bond container and receiving equipment
- Use explosion-proof electrical/ ventilating/ lighting/ equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge

Precautionary Statements - Response

- IF exposed or concerned: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool
Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other information

- May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Contains a known or suspected carcinogen

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

| Chemical Name | CAS No | Weight-% | ACGIH | OSHA |
|--------------------------------|------------|-----------|---|--|
| TITANIUM DIOXIDE | 13463-67-7 | 20% - 30% | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust |
| METHYL AMYL KETONE | 110-43-0 | 10% - 20% | TWA: 50 ppm | TWA: 100 ppm TWA: 465 mg/m ³ |
| BUTYL ACETATE | 123-86-4 | 5% - 10% | STEL: 200 ppm TWA: 150 ppm | TWA: 150 ppm TWA: 710 mg/m ³ |
| BUTYL ACETATE | 123-86-4 | 1% - 5% | STEL: 200 ppm TWA: 150 ppm | TWA: 150 ppm TWA: 710 mg/m ³ |
| CRISTOBLITE CRYSTALLINE SILICA | 14464-46-1 | 0% - 1% | TWA: 0.025 mg/m ³ respirable fraction | : (1/2)(30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (1/2)(250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (1/2)(10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction |
| ETHYLBENZENE | 100-41-4 | 0% - 1% | TWA: 20 ppm | TWA: 100 ppm TWA: 435 mg/m ³ |

4. FIRST AID MEASURES

First Aid Measures

| | |
|--|--|
| General advice | Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. |
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin Contact | Wash off immediately with plenty of water. |
| Inhalation | Remove to fresh air. |
| Ingestion | Clean mouth with water and afterwards drink plenty of water. |
| Self-protection of the first aider | Remove all sources of ignition. |
| Most important symptoms and effects, both acute and delayed | |
| Most Important Symptoms and Effects | No information available. |

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Extremely flammable.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment as required. Avoid breathing vapors or mists. Ventilate the area.

Environmental Precautions

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment

Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up

Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use explosion-proof electrical (ventilation and lighting) equipment. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks and flame.

Incompatible Products None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH | OSHA | NIOSH IDLH |
|---|--|--|--|
| TITANIUM DIOXIDE 13463-67-7 | TWA: 10 mg/m ³ | TWA: 15 mg/m ³ total dust | IDLH: 5000 mg/m ³ |
| METHYL AMYL KETONE 110-43-0 | TWA: 50 ppm | TWA: 100 ppm TWA: 465 mg/m ³ | IDLH: 800 ppm TWA: 100 ppm TWA: 465 mg/m ³ |
| BUTYL ACETATE 123-86-4 | STEL: 200 ppm TWA: 150 ppm | TWA: 150 ppm TWA: 710 mg/m ³ | IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³ |
| ALUMINUM OXIDE 1344-28-1 | TWA: 1 mg/m ³ respirable fraction | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction | |
| BUTYL ACETATE 123-86-4 | STEL: 200 ppm TWA: 150 ppm | TWA: 150 ppm TWA: 710 mg/m ³ | IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³ |
| CRISTOBLITE CRYSTALLINE SILICA 14464-46-1 | TWA: 0.025 mg/m ³ respirable fraction | : (1/2)(30)/(%SiO ₂ + 2) mg/m ³ TWA total dust : (1/2)(250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (1/2)(10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction | IDLH: 25 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust |
| XYLENE(PURE) 1330-20-7 | STEL: 150 ppm TWA: 100 ppm | TWA: 100 ppm TWA: 435 mg/m ³ | |
| ALUMINUM OXIDE 1344-28-1 | TWA: 1 mg/m ³ respirable fraction | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction | |
| ETHYLBENZENE 100-41-4 | TWA: 20 ppm | TWA: 100 ppm TWA: 435 mg/m ³ | IDLH: 800 ppm TWA: 100 ppm TWA: 435 mg/m ³ STEL: 125 ppm STEL: 545 mg/m ³ |

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

If splashes are likely to occur, wear safety glasses with side-shields.

Skin and Body Protection

Chemical resistant apron.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures

Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------------------------|-------------------|-------------------------------------|-------------------|
| Physical state | Liquid | Appearance | Opaque |
| Odor | Solvent. | Odor Threshold | No data available |
| pH | No data available | Flash Point | 12 °F / -11 °C |
| Decomposition temperature | No data available | Boiling Point | 171 °F / 77 °C |
| Melting Point / Melting Range | No data available | Freezing Point | No data available |
| Vapor Pressure @20°C (kPa) | No data available | Partition coefficient: | No data available |
| Vapor Density | No data available | Density | No data available |
| Bulk density | No data available | Specific Gravity | 1.34 |
| Evaporation Rate | No data available | Water solubility | No data available |
| Dynamic viscosity | No data available | Weight per Gallon (lbs/gal): | 11.15 |
| | | Flammability Limits in Air | |
| | | Upper | 2.48 % |
| | | Lower | 0.44 % |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|----------------------------|------------------------------------|
| Product Information | The product has not been tested |
| Inhalation | There is no data for this product. |
| Eye Contact | There is no data for this product. |
| Skin Contact | There is no data for this product. |
| Ingestion | There is no data for this product. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|------------------------|------------------------|
| TITANIUM DIOXIDE 13463-67-7 | 10000 mg/kg (Rat) | N/A | N/A |
| METHYL AMYL KETONE 110-43-0 | 1600 mg/kg (Rat) | 12.6 mL/kg (Rabbit) | 2000 ppm (Rat) 4 h |
| BUTYL ACETATE 123-86-4 | 10768 mg/kg (Rat) | 17600 mg/kg (Rabbit) | 390 ppm (Rat) 4 h |
| ALUMINUM OXIDE 1344-28-1 | 5000 mg/kg (Rat) | N/A | N/A |
| BUTYL ACETATE 123-86-4 | 10768 mg/kg (Rat) | 17600 mg/kg (Rabbit) | 390 ppm (Rat) 4 h |
| XYLENE(PURE) 1330-20-7 | 3500 mg/kg (Rat) | 4350 mg/kg (Rabbit) | 29.08 mg/L (Rat) 4 h |
| ALUMINUM OXIDE 1344-28-1 | 5000 mg/kg (Rat) | N/A | N/A |
| ETHYLBENZENE 100-41-4 | 3500 mg/kg (Rat) | 15400 mg/kg (Rabbit) | 17.2 mg/L (Rat) 4 h |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
MUTAGENIC EFFECTS No information available.
Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|-------|----------|-----|------|
| TITANIUM DIOXIDE 13463-67-7 | N/A | Group 2B | N/A | X |
| CRISTOBLITE CRYSTALLINE SILICA 14464-46-1 | A2 | Group 1 | N/A | X |
| XYLENE(PURE) 1330-20-7 | N/A | Group 3 | N/A | N/A |
| ETHYLBENZENE 100-41-4 | A3 | Group 2B | N/A | X |

Legend:

- ACGIH (American Conference of Governmental Industrial Hygienists)
- A2 - Suspected Human Carcinogen
- A3 - Animal Carcinogen
- IARC (International Agency for Research on Cancer)
- Group 1 - Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans
- Group 3 - Not Classifiable as to Carcinogenicity in Humans
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- X - Present

Reproductive Toxicity No information available.
Specific target organ systemic toxicity (single exposure) No information available.
Specific target organ systemic toxicity (repeated exposure) No information available.
Target Organ Effects Central nervous system (CNS), Eyes, Lungs, Peripheral Nervous System (PNS), Respiratory system, Skin.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

- ATEmix (oral) 4211 mg/kg
- ATEmix (dermal) 30474 mg/kg
- ATEmix (inhalation-dust/mist) 5.6 mg/l
- Oral LD50 6083 mg/kg (rat) Estimated
- Dermal LD50 39216 mg/kg (rat) Estimated

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to daphnia and other aquatic invertebrates |
|--------------------------------|---|---|---|
| METHYL AMYL KETONE 110-43-0 | N/A | 126 - 137: 96 h Pimephales promelas mg/L LC50 flow-through | N/A |
| BUTYL ACETATE 123-86-4 | 674.7: 72 h Desmodesmus subspicatus mg/L EC50 | 100: 96 h Lepomis macrochirus mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through | N/A |
| BUTYL ACETATE | 674.7: 72 h Desmodesmus | 100: 96 h Lepomis macrochirus | N/A |

| | | | |
|---------------------------|---|---|--|
| 123-86-4 | subspicatus mg/L EC50 | mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through | |
| XYLENE(PURE) 1330-20-7 | N/A | 13.4: 96 h Pimephales promelas mg/L LC50 flow-through 2.661 - 4.093: 96 h Oncorhynchus mykiss mg/L LC50 static 13.5 - 17.3: 96 h Oncorhynchus mykiss mg/L LC50 13.1 - 16.5: 96 h Lepomis macrochirus mg/L LC50 flow-through 19: 96 h Lepomis macrochirus mg/L LC50 7.711 - 9.591: 96 h Lepomis macrochirus mg/L LC50 static 23.53 - 29.97: 96 h Pimephales promelas mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 30.26 - 40.75: 96 h Poecilia reticulata mg/L LC50 static 780: 96 h Cyprinus carpio mg/L LC50 semi-static | 3.82: 48 h water flea mg/L EC50 0.6: 48 h Gammarus lacustris mg/L LC50 |
| ETHYLBENZENE 100-41-4 | 1.7 - 7.6: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 4.6: 72 h Pseudokirchneriella subcapitata mg/L EC50 438: 96 h Pseudokirchneriella subcapitata mg/L EC50 2.6 - 11.3: 72 h Pseudokirchneriella subcapitata mg/L EC50 static | 32: 96 h Lepomis macrochirus mg/L LC50 static 9.1 - 15.6: 96 h Pimephales promelas mg/L LC50 static 9.6: 96 h Poecilia reticulata mg/L LC50 static 11.0 - 18.0: 96 h Oncorhynchus mykiss mg/L LC50 static 4.2: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 7.55 - 11: 96 h Pimephales promelas mg/L LC50 flow-through | 1.8 - 2.4: 48 h Daphnia magna mg/L EC50 |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|--------------------------------|-----------------------|
| METHYL AMYL KETONE 110-43-0 | 1.98 |
| BUTYL ACETATE 123-86-4 | 1.81 |
| BUTYL ACETATE 123-86-4 | 1.81 |
| ETHYLBENZENE 100-41-4 | 3.118 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number

D001

| Chemical Name | RCRA - Basis for Listing | RCRA - D Series Wastes |
|---------------------------|--------------------------------|------------------------|
| XYLENE(PURE) 1330-20-7 | Included in waste stream: F039 | N/A |
| ETHYLBENZENE 100-41-4 | Included in waste stream: F039 | N/A |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|---------------------------|-----------------------------------|
| BUTYL ACETATE 123-86-4 | Toxic |
| BUTYL ACETATE 123-86-4 | Toxic |
| XYLENE(PURE) 1330-20-7 | Toxic Ignitable |
| ETHYLBENZENE 100-41-4 | Toxic Ignitable |

14. TRANSPORT INFORMATION

DOT

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Special Provisions 149, B52, IB2, T4, TP1, TP8, TP28
 Description UN1263, Paint, 3, II, RQ
 Emergency Response Guide Number 128

TDG

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Description UN1263, Paint, 3, II

MEX

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Special Provisions A3, A72
 Description UN1263, Paint, 3, II

IATA

UN-No UN1263
 Hazard class 3
 Packing Group II
 ERG Code 3L
 Special Provisions A3, A72, A192

IMDG/IMO

UN-No UN1263
 Hazard class 3
 Packing Group II
 EmS-No F-E, S-E
 Special Provisions 163, 367

RID

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Classification Code F1
 Description UN1263, Paint, 3, II

ADR/RID

UN-No UN1263
 Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Classification Code F1
 Tunnel restriction code (D/E)
 Special Provisions 163, 640C, 650, 367
 Description UN1263, Paint, 3, II, (D/E)
 ADR/RID-Labels 3

ADN

Proper shipping name Paint
 Hazard class 3
 Packing Group II
 Classification Code F1
 Special Provisions 163, 640C, 650
 Description UN1263, Paint, 3, II
 Hazard Labels 3
 Limited Quantity (LQ) 5 L
 Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDSL Complies
 EINECS/ELINCS Complies
 ENCS Complies
 IECSC Complies
 KECL Complies
 PICCS Complies
 AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS No | SARA 313 - Threshold Values % |
|----------------|-----------|-------------------------------|
| ALUMINUM OXIDE | 1344-28-1 | 1.0 |
| ETHYLBENZENE | 100-41-4 | 0.1 |

SARA 311/312 Hazard Categories

Acute Health Hazard No

| | |
|-----------------------------------|-----|
| Chronic Health Hazard | No |
| Fire Hazard | Yes |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

| Chemical Name | CAS No | Hazardous air pollutants (HAPs) content |
|---------------|-----------|---|
| XYLENE(PURE) | 1330-20-7 | Present |
| ETHYLBENZENE | 100-41-4 | Present |

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| BUTYL ACETATE | 5000 lb | N/A | N/A | X |
| BUTYL ACETATE | 5000 lb | N/A | N/A | X |
| XYLENE(PURE) | 100 lb | N/A | N/A | X |
| ETHYLBENZENE | 1000 lb | X | X | X |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ (reportable quantity) |
|---------------|--------------------------|------------------------------------|--|
| BUTYL ACETATE | 5000 lb | N/A | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| BUTYL ACETATE | 5000 lb | N/A | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| XYLENE(PURE) | 100 lb | N/A | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| ETHYLBENZENE | 1000 lb | N/A | RQ 1000 lb final RQ RQ 454 kg final RQ |

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | CAS No | California Proposition 65 |
|------------------|------------|---------------------------|
| TITANIUM DIOXIDE | 13463-67-7 | Carcinogen |
| ETHYLBENZENE | 100-41-4 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------------------------------|---------------|------------|--------------|----------|--------------|
| TITANIUM DIOXIDE | X | X | X | N/A | X |
| METHYL AMYL KETONE | X | X | X | N/A | N/A |
| BUTYL ACETATE | X | X | X | N/A | N/A |
| ALUMINUM OXIDE | X | X | X | N/A | N/A |
| BUTYL ACETATE | X | X | X | N/A | X |
| CRISTOBLITE CRYSTALLINE SILICA | X | X | X | X | N/A |
| XYLENE(PURE) | X | X | X | X | X |
| TRIETHYL ORTHOFORMATE | X | X | X | N/A | N/A |
| ETHYLBENZENE | X | X | X | X | X |

International Regulations

Mexico - Grade Serious risk, Grade 3

| Chemical Name | Carcinogenic Status | Exposure Limits |
|--------------------------------|---------------------|--|
| TITANIUM DIOXIDE | N/A | Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³ |
| METHYL AMYL KETONE | N/A | Mexico: TWA 50 ppm Mexico: TWA 235 mg/m ³ Mexico: STEL 100 ppm Mexico: STEL 465 mg/m ³ |
| BUTYL ACETATE | N/A | Mexico: TWA 150 ppm Mexico: TWA 710 mg/m ³ Mexico: STEL 200 ppm Mexico: STEL 950 mg/m ³ |
| ALUMINUM OXIDE | N/A | Mexico: TWA 10 mg/m ³ |
| BUTYL ACETATE | N/A | Mexico: TWA 150 ppm Mexico: TWA 710 mg/m ³ Mexico: STEL 200 ppm Mexico: STEL 950 mg/m ³ |
| CRISTOBLITE CRYSTALLINE SILICA | N/A | Mexico: TWA 0.05 mg/m ³ |
| XYLENE(PURE) | N/A | Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 150 ppm Mexico: STEL 655 mg/m ³ |
| ALUMINUM OXIDE | N/A | Mexico: TWA 10 mg/m ³ |
| ETHYLBENZENE | N/A | Mexico: TWA 100 ppm Mexico: TWA 435 mg/m ³ Mexico: STEL 125 ppm Mexico: STEL 545 mg/m ³ |

16. OTHER INFORMATION

NFPA Health Hazard 2 Flammability 3 Instability 0 Physical and Chemical Hazards -

NFPA Rating



HMIS Health Hazard 1 * Flammability 3 Physical Hazard 0 Personal protection X

Chronic Hazard Star Legend

* Chronic Health Hazard

Issuing Date: 22-May-2015

Revision Date: 28-Sep-2016

Revision Note

No information available

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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. TS-1-G1GV

end



SAFETY DATA SHEET

Issuing Date: 22-May-2015

Revision Date: 22-May-2015

Revision Number: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code: PH-15
Hentzen Coatings, Inc.
6937 West Mill Road, Milwaukee, WI 53218-1225

Product Name: POLYURETHANE CURING SOLUTION
Company Phone Number: 1-414-353-4200
Emergency telephone number ChemTrec 1-800-424-9300

Recommended use of the chemical and restrictions on use

Industrial paint (Paint or Paint-Related), Restricted to professional users

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|--|------------|
| Acute toxicity - Oral | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Flammable Liquids | Category 3 |

Label Elements

Emergency Overview

DANGER

Hazard Statements

Fatal if swallowed
May cause respiratory irritation. May cause drowsiness or dizziness
Flammable liquid and vapor



Appearance Opaque

Physical state Liquid

Odor Solvent

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth
 In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
 Store in accordance with local regulations

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)**Other information**

3. COMPOSITION/INFORMATION ON INGREDIENTS

There are no known carcinogenic chemicals in this product

This product contains substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990. See Section 15 for list of HAPS.

| Chemical Name | CAS No | Weight-% | ACGIH | OSHA |
|---|------------|-----------|-------------------------------|--|
| HOMOPOLYMER OF HEXAMETHYLENE DIISOCYANATE | 28182-81-2 | 70% - 80% | N/A | N/A |
| BUTYL ACETATE | 123-86-4 | 20% - 30% | STEL: 200 ppm TWA: 150 ppm | TWA: 150 ppm TWA: 710 mg/m ³ |
| HEXAMETHYLENE DIISOCYANATE | 822-06-0 | 0% - 1% | TWA: 0.005 ppm | N/A |

4. FIRST AID MEASURES

First Aid Measures

| | |
|---------------------|---|
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin Contact | Wash off immediately with soap and plenty of water. Consult a physician if necessary. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| Inhalation | Asthma-like and/ or skin allergy-like symptoms. |
| Ingestion | Call a physician immediately. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. |

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use: Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol-resistant foam.

Unsuitable Extinguishing Media No information available.

Specific hazards arising from the chemical

Flammable. Containers may explode when heated or if contaminated with water.

Explosion Data

Sensitivity to Mechanical Impact no data available.

Sensitivity to Static Discharge Yes.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists. Ventilate the area. Remove all sources of ignition. Use personal protective equipment as required.

Other information

DECONTAMINATION SOLUTION: Concentrated ammonia (3 - 8%), detergent (2%) and water (90 - 95%), a solution of Union Carbide's Tergitol TMN-10 (20%) and water (80%) or a solution of 50% isopropanol, 45% water, and 5% concentrated ammonia solution(% by weight).

Environmental Precautions

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Methods and materials for containment and cleaning up

Methods for Containment

Decontaminate floor with decontamination solution letting stand for at least 15 minutes. Soak up with inert absorbent material.

Methods for Cleaning Up

With clean shovel place material into clean, dry container and cover loosely; move containers from spill area. Do not contaminate ponds, waterways or ditches with chemical or used container. Dam up. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Do not breathe vapor or mist. Use with local exhaust ventilation. Wear protective gloves/protective clothing/eye protection/face protection. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Keep away from heat, sparks and flame. Protect from moisture.

Incompatible Products Water. Glycol ethers. Alcohols. Epoxies. Bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical Name | ACGIH | OSHA | NIOSH IDLH |
|---|-------------------------------|--|--|
| BUTYL ACETATE 123-86-4 | STEL: 200 ppm TWA: 150 ppm | TWA: 150 ppm TWA: 710 mg/m ³ | IDLH: 1700 ppm TWA: 150 ppm TWA: 710 mg/m ³ STEL: 200 ppm STEL: 950 mg/m ³ |
| HEXAMETHYLENE DIISOCYANATE 822-06-0 | TWA: 0.005 ppm | N/A | Ceiling: 0.020 ppm 10 min Ceiling: 0.140 mg/m ³ 10 min TWA: 0.005 ppm TWA: 0.035 mg/m ³ |

NIOSH IDLH: Immediately Dangerous to Life or Health

Exposure controls

Engineering Measures Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use personal protective equipment as required.

Skin and Body Protection Chemical resistant apron.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------------------------|-------------------|-------------------------------------|-------------------|
| Physical state | Liquid | Appearance | Opaque |
| Odor | Solvent. | Odor Threshold | No data available |
| pH | No data available | Flash Point | 78 °F / 26 °C |
| Decomposition temperature | No data available | Boiling Point | 244 °F / 118 °C |
| Melting Point / Melting Range | No data available | Freezing Point | No data available |
| Vapor Pressure @20°C (kPa) | No data available | Partition coefficient: | No data available |
| Vapor Density | No data available | Density | No data available |
| Bulk density | No data available | Specific Gravity | 1.07 |
| Evaporation Rate | No data available | Water solubility | No data available |
| Dynamic viscosity | No data available | Weight per Gallon (lbs/gal): | 8.88 |
| | | Flammability Limits in Air | |
| | | Upper | 2.08 % |
| | | Lower | 0.47 % |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Water. Glycol ethers. Alcohols. Epoxies. Bases.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|----------------------------|------------------------------------|
| Product Information | The product has not been tested |
| Inhalation | There is no data for this product. |
| Eye Contact | There is no data for this product. |
| Skin Contact | There is no data for this product. |
| Ingestion | There is no data for this product. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---------------------|------------------------|-----------------------|
| BUTYL ACETATE 123-86-4 | 14.13 mg/kg (Rat) | 17600 mg/kg (Rabbit) | 390 ppm (Rat) 4 h |
| HEXAMETHYLENE DIISOCYANATE 822-06-0 | 738 mg/kg (Rat) | 593 mg/kg (Rabbit) | 0.06 mg/L (Rat) 4 h |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Sensitization | No information available. |
| MUTAGENIC EFFECTS | No information available. |
| Legend: | |
| Reproductive Toxicity | No information available. |
| Specific target organ systemic toxicity (single exposure) | No information available. |
| Specific target organ systemic toxicity (repeated exposure) | No information available. |
| Chronic Toxicity | Avoid repeated exposure. |
| Target Organ Effects | Central nervous system (CNS), Eyes, Respiratory system, Skin. |
| Aspiration hazard | No information available. |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

| | |
|-------------------------------|-----------------------------|
| ATEmix (oral) | 14 mg/kg |
| ATEmix (dermal) | 17693 mg/kg |
| ATEmix (inhalation-dust/mist) | 76.5 mg/l |
| Oral LD50 | 65 mg/kg (rat) Estimated |
| Dermal LD50 | 63547 mg/kg (rat) Estimated |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to daphnia and other aquatic invertebrates |
|--|---|---|---|
| BUTYL ACETATE 123-86-4 | 674.7: 72 h Desmodesmus subspicatus mg/L EC50 | 100: 96 h Lepomis macrochirus mg/L LC50 static 17 - 19: 96 h Pimephales promelas mg/L LC50 flow-through | N/A |
| HEXAMETHYLENE DIISOCYANATE 822-06-0 | N/A | 26.1: 96 h Brachydanio rerio mg/L LC50 static | N/A |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|---------------------------|-----------------------|
| BUTYL ACETATE 123-86-4 | 1.81 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste treatment methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

US EPA Waste Number D001

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|---------------------------|-----------------------------------|
| BUTYL ACETATE 123-86-4 | Toxic |

14. TRANSPORT INFORMATION

DOT

| | |
|----------------------|-----------------------------------|
| UN-No | UN1263 |
| Proper shipping name | Paint |
| Hazard class | 3 |
| Packing Group | II |
| Special Provisions | 149, B52, IB2, T4, TP1, TP8, TP28 |
| Description | UN1263, Paint, 3, II, RQ |

**Emergency Response Guide
Number** 128

TDG

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

MEX

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

ICAO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Special Provisions A3, A72
Description UN1263, Paint, 3, II

IMDG/IMO

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
EmS-No F-E, S-E
Special Provisions 163
Description UN1263, Paint, 3, II

RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Description UN1263, Paint, 3, II

ADR/RID

UN-No UN1263
Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Tunnel restriction code (D/E)

Special Provisions 163, 640C, 650
Description UN1263, Paint, 3, II, (D/E)
ADR/RID-Labels 3

ADN

Proper shipping name Paint
Hazard class 3
Packing Group II
Classification Code F1
Special Provisions 163, 640C, 650
Description UN1263, Paint, 3, II
Limited Quantity (LQ) 5 L
Ventilation VE01

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies
KECL Complies
PICCS Complies
AICS Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard No
Fire Hazard Yes
Sudden Release of Pressure Hazard No
Reactive Hazard No

CAA (Clean Air Act)

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants This product contains the following HAPs:

| Chemical Name | CAS No | Hazardous air pollutants (HAPs) content |
|----------------------------|----------|---|
| HEXAMETHYLENE DIISOCYANATE | 822-06-0 | Present |

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| BUTYL ACETATE | 5000 lb | N/A | N/A | X |

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ (reportable quantity) |
|----------------------------|--------------------------|------------------------------------|--|
| BUTYL ACETATE | 5000 lb | N/A | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| HEXAMETHYLENE DIISOCYANATE | 100 lb | N/A | RQ 100 lb final RQ RQ 45.4 kg final RQ |

State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------|---------------|------------|--------------|----------|--------------|
| BUTYL ACETATE | X | X | X | N/A | N/A |

International Regulations

Mexico - Grade

Serious risk, Grade 3

| Chemical Name | Carcinogenic Status | Exposure Limits |
|---------------|---------------------|--|
| BUTYL ACETATE | N/A | Mexico: TWA 150 ppm Mexico: TWA 710 mg/m ³ Mexico: STEL 200 ppm Mexico: STEL 950 mg/m ³ |

16. OTHER INFORMATION

NFPA Health Hazard 2 Flammability 3 Instability 0 Physical and Chemical Hazards -

NFPA Rating



HMIS Health Hazard 2 Flammability 3 Physical Hazard 1 Personal protection X

Issuing Date: 22-May-2015

Revision Date: 22-May-2015

Revision Note

No information available

Disclaimer

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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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. PH-15GV

end