Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

BC-622A Part B

Synonyms

Aliphatic Isocyanate

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

Relevant identified use(s) • Reflective Paint

1.3 Details of the supplier of the safety data sheet

Manufacturer • Saint-Gobain Crystals

17900 Great Lakes Parkway

Hiram, OH 44234 United States

www.crystals.saint-gobain.com scintillation@saint-gobain.com

Telephone (General) • 440-834-5600

1.4 Emergency telephone number

Manufacturer1-800-424-9300 - ChemTrecManufacturer703-525-3887 - Outside U.S.

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

• Flammable Liquids 3 - H226

Skin Irritation 2 - H315 Skin Sensitization 1 - H317 Eye Irritation 2 - H319

Respiratory Sensitization 1 - H334

Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336

Specific Target Organ Toxicity Single Exposure 1 - H370

EUH066

DSD/DPD • Toxic (T)

Irritant (Xi) Harmful (Xn)

R10, R20, R36/38, R39/23, R42/43, R66, R67

2.2 Label Elements

DANGER







Hazard statements ·

H226 - Flammable liquid and vapour

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H336 - May cause drowsiness or dizziness

H370 - Causes damage to organs.

EUH066 - Repeated exposure may cause skin dryness or cracking.

Precautionary statements

Prevention • P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P240 - Ground and/or bond container and receiving equipment.

P241 - Use explosion-proof electrical/ventilating/lighting/equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe mists, vapours, and/or spray.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves and eye/face protection, .

P285 - In case of inadequate ventilation wear respiratory protection.

Response • P370+P378 - In case of fire: Use appropriate media for extinction.

P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363 - Wash contaminated clothing before reuse.

P321 - Specific treatment, see supplemental first aid information.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eve irritation persists: Get medical advice/attention.

P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor/physician.

Storage/Disposal •

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P235 - Keep cool.

P405 - Store locked up.

P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

DSD/DPD







Risk phrases • R10 - Flammable.

R20 - Harmful by inhalation.

R36/38 - Irritating to eyes and skin.

R39/23 - Toxic: danger of very serious irreversible effects through inhalation.

R42/43 - May cause sensitisation by inhalation and skin contact.

R66 - Repeated exposure may cause skin dryness or cracking.

R67 - Vapours may cause drowsiness and dizziness.

Safety phrases • S26 - In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice.

S37 - Wear suitable gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show

the label where possible).

2.3 Other Hazards

• According to Regulation (EC) No. 1272/2008 (CLP) this material is considered

hazardous.

• According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Flammable Liquids 3

Skin Irritation 2
Skin Sensitization 1
Eye Irritation 2

Respiratory Sensitization 1

Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation

Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

Specific Target Organ Toxicity Single Exposure 1

2.2 Label elements OSHA HCS 2012

DANGER







Hazard statements • Flammable liquid and vapour

Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation May cause drowsiness or dizziness

Causes damage to organs.

Precautionary statements

Prevention • Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.

Keep container tightly closed.

Ground and/or bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe mists, vapours, and/or spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves and eye/face protection, .

In case of inadequate ventilation wear respiratory protection.

Response • In case of fire: Use appropriate media for extinction.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a

position comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

If on skin: Wash with plenty of water .

Take off contaminated clothing and wash before reuse. Specific treatment, see supplemental first aid information. If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Call a POISON CENTER or doctor/physician if you feel unwell. IF exposed: Call POISON CENTER or doctor/physician.

Storage/Disposal • Store in a well-ventilated place. Keep container tightly closed.

Keep cool. Store locked up.

Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations.

2.3 Other hazards

OSHA HCS 2012

 Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

Combustible Liquids - B3
 Other Toxic Effects - D2A
 Other Toxic Effects - D2B

2.2 Label elements

WHMIS





WHMIS
 Combustible Liquids - B3

Other Toxic Effects - D2A Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

 In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

· Material does not meet the criteria of a substance.

3.2 Mixtures

| | | | Comp | osition | |
|---------------|-------------|---|-----------|---|----------|
| Chemical Name | Identifiers | % | LD50/LC50 | Classifications According to Regulation/Directive | Comments |
| | | | | EU DSD/DPD: Xn; R20; Xi; R36/38; Xi; R42/43; T; R39/23 | |

| Hexamethylene diisocyanate homopolymer | CAS :28182-81-2 | 70% TO 80% | Inhalation-Rat LC50 • 18500 mg/m³ 1 Hour (s) | EU CLP: Acute Tox. 4, H332; Eye Irrit. 2, H319; Skin Irrit. 2, H315; Skin Sens. 1, H317; Resp. Sens. 1, H334; STOT SE 1 (Lungs, Inhl), H370 OSHA HCS 2012: Acute Tox. 4 (inhl); Eye Irrit. 2; Skin Irrit. 2; Skin Sens. 1; Resp. Sens. 1; STOT SE 1 (Lungs, Inhl); | NDA |
|--|---|------------------|---|--|-----|
| Acetic acid, butyl ester | CAS:123-86-4 EC Number:204- 658-1 EU Index:607- 025-00-1 | 10% TO 20% | Ingestion/Oral-Rat LD50 • 10768 mg/kg Inhalation-Rat LC50 • 390 ppm 4 Hour(s) Skin-Rabbit LD50 • >17600 mg/kg | EU DSD/DPD: Annex VI, Table 3.2: R10; R66; R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; STOT SE 3: Narc., H336; EUH066 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2B; STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. (Inhl) | NDA |
| 2-Heptanone | CAS:110-43-0 EC Number:203- 767-1 EU Index:606- 024-00-3 | 10% TO 20% | Skin-Rabbit LD50 • 12600 µL/kg Ingestion/Oral-Rat LD50 • 1600 mg/kg | EU DSD/DPD: Annex VI, Table 3.2: R10; Xn; R20/22 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Acute Tox. 4 *, H332; Acute Tox. 4 *, H302 OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (orl); STOT SE 3: Narc. | NDA |

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

• IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.

Skin

IF ON SKIN: Wash with plenty of soap and water. Wash skin with soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

Eye

 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

 Never give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Do NOT induce vomiting. Have victim drink 60 to 240 ml (2 to 8 oz.) of water. If vomiting occurs naturally, have victim rinse mouth with water again. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

· Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

All treatments should be based on observed signs and symptoms of distress in the
patient. Consideration should be given to the possibility that overexposure to materials
other than this product may have occurred.

See Section 2 for Potential Health Effects.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Use dry chemical, foam or fog.

Unsuitable Extinguishing Media

No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames.

Containers may explode when heated. Extremely flammable liquid and vapor. Vapors may form explosive mixtures with air.

Vapor explosion hazard indoors, outdoors or in sewers. Vapors may travel to source of ignition and flash back.

Runoff to sewer may create fire or explosion hazard.

Hazardous Combustion Products

 Hydrogen cyanide, Isocyanate, Amines, Carbon dioxide, Carbon monoxide, Oxides of nitrogen, and Dense black smoke.

5.3 Advice for firefighters

Wear positive pressure self-contained breathing apparatus (SCBA).

Move containers from fire area if you can do it without risk.

Use water spray to cool fire-exposed containers.

Structural firefighters' protective clothing will only provide limited protection. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

 Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas.

Emergency Procedures

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep out of low areas. Keep unauthorized personnel away. Stay upwind. Ventilate closed spaces before entering.

6.2 Environmental precautions

Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

Stop leak if you can do it without risk.

All equipment used when handling the product must be grounded.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to

containers.

Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors. LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

6.4 Reference to other sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

 Use only in well ventilated areas. Avoid contact with heat and ignition sources. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapors, or spray. Avoid contact with skin, eyes or clothing. Use only non-sparking tools. Take precautionary measures against static charges. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Store in a cool/low-temperature, well-ventilated place. Keep away from heat and ignition sources. Keep container closed when not in use. Keep away from incompatible materials.

7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

| | | Exposure | Limits/Guidelines | |
|---------------------------|--------|--------------|------------------------------|----------------------------|
| | Result | ACGIH | NIOSH | OSHA |
| Acetic acid, butyl ester | TWAs | 150 ppm TWA | 150 ppm TWA; 710 mg/m3 TWA | 150 ppm TWA; 710 mg/m3 TWA |
| | STELs | 200 ppm STEL | 200 ppm STEL; 950 mg/m3 STEL | Not established |
| 2-Heptanone (110-43-0) | TWAs | 50 ppm TWA | 100 ppm TWA; 465 mg/m3 TWA | 100 ppm TWA; 465 mg/m3 TWA |

8.2 Exposure controls

Engineering Measures/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. Use explosion-proof - electrical, ventilating and/or lighting equipment.

Personal Protective Equipment

Respiratory

 Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

Wear chemical splash safety goggles.

Skin/Body

Wear appropriate gloves.

Environmental Exposure Controls

 Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

| Material Description | | | |
|-----------------------------------|----------------------------------|------------------------------|--|
| Physical Form | Liquid | Appearance/Description | Viscous liquid dispersion with a solvent odor. |
| Color | Data lacking | Odor | Solvent |
| Odor Threshold | Data lacking | | |
| General Properties | - | | • |
| Boiling Point | 126 to 152 °C(258.8 to 305.6 °F) | Melting Point/Freezing Point | Data lacking |
| Decomposition Temperature | Data lacking | рН | Data lacking |
| Specific Gravity/Relative Density | = 1.051 Water=1 | Density | 8.77 lbs/gal |
| Water Solubility | Data lacking | Viscosity | Data lacking |
| Explosive Properties | Data lacking | Oxidizing Properties: | Data lacking |

| Volatility | | | |
|-------------------------------------|---------------------------|---------------|--------------|
| Vapor Pressure | 2.8 mbar @ 14 °C(57.2 °F) | Vapor Density | Data lacking |
| Evaporation Rate | Data lacking | | |
| Flammability | | - | |
| Flash Point | 39 °C(102.2 °F) | UEL | 7.9 % |
| LEL | 1.1 % | Autoignition | Data lacking |
| Flammability (solid, gas) | Data lacking | | |
| Environmental | | - | - |
| Octanol/Water Partition coefficient | Data lacking | | |

9.2 Other Information

· No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

· No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

 Avoid heat, sparks, open flames and other ignition sources. Contact with moisture, materials that react with isocyanates or temperatures above 400 F Incompatible materials.

10.5 Incompatible materials

 Water, Strong bases, Copper, Strong oxidizing agents, Nitric acid, Sodium hydroxide, Alkali metal hydroxides.

10.6 Hazardous decomposition products

· Carbon monoxide, carbon dioxide, oxides of nitrogen, traces of HCN and HDI.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

| | | Components |
|--|----------------|---|
| Hexamethylene diisocyanate homopolymer (70% TO 80%) | 28182- 81-2 | Acute Toxicity: Inhalation-Rat LC50 • 18500 mg/m³ 1 Hour(s); Inhalation-Rat TCLo • 1.3 mg/m³ 6 Hour(s); Lungs, Thorax, or Respiration:Acute pulmonary edema; Lungs, Thorax, or Respiration:Changes in lung weight; Irritation: Eye-Rabbit • 100 mg • Moderate irritation; Skin-Rabbit • 500 mg • Moderate irritation |
| Acetic acid, butyl ester (10% TO 20%) | 123-86 -4 | Acute Toxicity: Ingestion/Oral-Rat LD50 • 10768 mg/kg; Behavioral:Somnolence (general depressed activity); Lungs, Thorax, or Respiration:Other changes; Liver:Other changes; Skin-Rabbit LD50 • >17600 mg/kg; Irritation: Eye-Rabbit • 100 mg • Moderate irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 1500 ppm 6 Hour(s) 13 Week(s)-Intermittent; Behavioral:Somnolence (general depressed activity); Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Inhalation-Rat TCLo • 1500 ppm 6 Hour(s) 13 Week(s)- Continuous; Behavioral:Somnolence (general depressed activity); Behavioral:Food intake (animal); Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Reproductive: Inhalation-Rat TCLo • 1500 ppm 7 Hour(s)(7-16D preg); Reproductive Effects:Effects on Embryo |

| | | or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Inhalation-Rat TCLo • 1500 ppm (6-20D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus) |
|-----|--------|---|
| ' ' | 110 42 | Acute Toxicity: Ingestion/Oral-Rat LD50 • 1600 mg/kg; Behavioral:Ataxia; Lungs, Thorax, or Respiration:Respiratory depression; Inhalation-Guinea Pig TCLo • 9300 mg/m³ 4 Hour(s); Behavioral:General anesthetic; Skin-Rabbit LD50 • 12600 µL/kg; Irritation: Skin-Rabbit • 14 mg 24 Hour(s)-Open • Mild irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 400 ppm 34 Day(s)-Intermittent; Behavioral:Somnolence (general depressed activity); Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Reproductive: Inhalation-Rat TCLo • 400 ppm (28D pre/1-19D preg); Reproductive Effects:Maternal Effects:Other effects |

| GHS Properties | Classification |
|-------------------------------|--|
| Acute toxicity | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Skin corrosion/Irritation | EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2 |
| Serious eye damage/Irritation | EU/CLP • Eye Irritation 2 OSHA HCS 2012 • Eye Irritation 2 |
| Skin sensitization | EU/CLP • Skin Sensitizer 1 OSHA HCS 2012 • Skin Sensitizer 1 |
| Respiratory sensitization | EU/CLP • Respiratory Sensitizer 1 OSHA HCS 2012 • Respiratory Sensitizer 1 |
| Aspiration Hazard | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Carcinogenicity | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Germ Cell Mutagenicity | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| Toxicity for Reproduction | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |
| STOT-SE | EU/CLP • Specific Target Organ Toxicity Single Exposure 1; Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 1; Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation |
| STOT-RE | EU/CLP • Data lacking OSHA HCS 2012 • Data lacking |

Potential Health Effects Inhalation

Acute (Immediate)

 May cause respiratory irritation. Breathing large amounts of this material (above recommended exposure limits) may result in Central Nervous System depression resulting in dizziness, drowsiness, weakness, fatigue, nausea, headache, and unconsciousness. Exposure to Polymeric hexamethylene diisocyanate may lead to bronchitis, bronchial spasm and pulmonary edema. These effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms have also been reported.

Chronic (Delayed)

• May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin

Acute (Immediate)

· Causes skin irritation.

Chronic (Delayed)

 May cause skin sensitization and development of allergic contact dermatitis in a small proportion of individuals and may aggravate an existing dermatitis. Repeated exposure may cause skin dryness or cracking.

Eye

Acute (Immediate)

· Causes serious eye irritation.

Chronic (Delayed)

· No data available

Ingestion

Acute (Immediate)

· May cause gastrointestinal irritation.

Chronic (Delayed)

· No data available

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

Section 12 - Ecological Information

12.1 Toxicity

· Material data lacking.

12.2 Persistence and degradability

· Material data lacking.

12.3 Bioaccumulative potential

Material data lacking.

12.4 Mobility in Soil

Material data lacking.

12.5 Results of PBT and vPvB assessment

· PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects

Material data lacking.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

 Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

| | 14.1 UN number | 14.2 UN proper shipping name | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards |
|-----|-------------------|------------------------------|---------------------------------|-----------------------|-------------------------------|
| DOT | UN1263 | Paint | 3 | III | NDA |

| TDG | UN1263 | PAINT | 3 | III | NDA |
|-----------|--------|-------|---|-----------|-----|
| IMO/IMDG | UN1263 | PAINT | 3 | | NDA |
| IATA/ICAO | UN1263 | Paint | 3 | III | NDA |

14.6 Special precautions for • None specified. user

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code · Data lacking.

Section 15 - Regulatory Information

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

SARA Hazard Classifications • Acute, Chronic, Fire

| | | | Inventory | | | |
|--|------------|------------|-------------|-----------|-----------|------|
| Component | CAS | Canada DSL | Canada NDSL | EU EINECS | EU ELNICS | TSCA |
| 2-Heptanone | 110-43-0 | Yes | No | Yes | No | Yes |
| Acetic acid, butyl ester | 123-86-4 | Yes | No | Yes | No | Yes |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Yes | No | No | No | Yes |

Canada

| .abor Canada - WHMIS - Classifications of Substances | | |
|---|------------|------------|
| Acetic acid, butyl ester | 123-86-4 | B2 |
| • 2-Heptanone | 110-43-0 | B3, D2B |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| anada - WHMIS - Ingredient Disclosure List | | |
| Acetic acid, butyl ester | 123-86-4 | 1 % |
| 2-Heptanone | 110-43-0 | 1 % |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |

| Ε | n | ٧ | İI | 0 | n | n | n | е | n | t | |
|---|---|---|----|---|---|---|---|---|---|---|--|
| | | | | | | | | | | | |

| Canada - CEPA - Priority Substances List | | | | | |
|--|------------|------------|--|--|--|
| Acetic acid, butyl ester | 123-86-4 | Not Listed | | | |
| • 2-Heptanone | 110-43-0 | Not Listed | | | |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed | | | |
| | | | | | |

United States

| Labor U.S OSHA - Process Safety Management - Highly Hazardous Chemicals | | |
|---|------------|------------|
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S OSHA - Specifically Regulated Chemicals • Acetic acid, butyl ester | 123-86-4 | Not Listed |

| Acetic acid, butyl ester 2-Heptanone Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | 123-86-4 110-43-0 28182-81-2 | Not Listed Not Listed Not Listed |
|---|------------------------------------|---|
| J.S CAA (Clean Air Act) - 1990 Hazardous Air Pollutants • Acetic acid, butyl ester • 2-Heptanone • Hexamethylene diisocyanate homopolymer J.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities • Acetic acid, butyl ester • 2-Heptanone • Hexamethylene diisocyanate homopolymer J.S CERCLA/SARA - Radionuclides and Their Reportable Quantities • Acetic acid, butyl ester • Acetic acid, butyl ester • 2-Heptanone | 110-43-0 | |
| Acetic acid, butyl ester 2-Heptanone Hexamethylene diisocyanate homopolymer J.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Acetic acid, butyl ester 2-Heptanone Hexamethylene diisocyanate homopolymer J.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | 110-43-0 | |
| 2-Heptanone Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Acetic acid, butyl ester 2-Heptanone Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | 110-43-0 | |
| Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities Acetic acid, butyl ester 2-Heptanone Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | | |
| U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities • Acetic acid, butyl ester • 2-Heptanone • Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities • Acetic acid, butyl ester • 2-Heptanone | | Not Listed |
| Acetic acid, butyl ester 2-Heptanone Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | | |
| 2-Heptanone Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | | 5000 lb final RQ (listed under |
| Hexamethylene diisocyanate homopolymer U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities Acetic acid, butyl ester 2-Heptanone | 123-86-4 | Butyl acetate); 2270 kg final RQ (listed under Butyl acetate) |
| U.S CERCLA/SARA - Radionuclides and Their Reportable Quantities • Acetic acid, butyl ester • 2-Heptanone | 110-43-0 | Not Listed |
| Acetic acid, butyl ester2-Heptanone | 28182-81-2 | Not Listed |
| • 2-Heptanone | | |
| · | 123-86-4 | Not Listed |
| | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S CERCLA/SARA - Section 313 - Emission Reporting | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S CERCLA/SARA - Section 313 - PBT Chemical Listing | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| Jnited States - California | | |
| Jnited States - Camornia Environment | | |

| U.S California - Proposition 65 - Carcinogens List | | |
|--|------------|------------|
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S California - Proposition 65 - Developmental Toxicity | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL) | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |

| 2-Heptanone Hexamethylene diisocyanate homopolymer | 110-43-0 28182-81-2 | Not Listed Not Listed |
|---|------------------------|--------------------------|
| U.S California - Proposition 65 - No Significant Risk Levels (NSRL) • Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |
| U.S California - Proposition 65 - Reproductive Toxicity - Male | | |
| Acetic acid, butyl ester | 123-86-4 | Not Listed |
| • 2-Heptanone | 110-43-0 | Not Listed |
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | Not Listed |

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16 - Other Information

Relevant Phrases (code & full text)

H302 - Harmful if swallowed
 H332 - Harmful if inhaled

R20/22 - Harmful by inhalation and if swallowed.

Revision Date

Preparation Date

Disclaimer/Statement of Liability

24/May/2017

19/January/2016

 Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgement.

Key to abbreviations NDA = No Data Available