

Safety Data Sheet prepared to UN GHS Revision 3

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

1.1 Product Identifier 200-SEALUV-A Revision Date: 05/28/2014

Product Name: Flowseal UV Base A Supercedes Date: 01/30/2014

1.2 Relevant identified uses of the

substance or mixture and uses

advised against

Base component of 2

components coatings - Industrial

use

1.3 Details of the supplier of the safety data sheet

Manufacturer: Flowcrete North America, Inc.

616 Spring Hill Drive, Suite 100

Spring, TX 77386

americas@flowcrete.com www.flowcreteamericas.com

Tel: (936) 539-6700 Fax: (936) 539-6701

Datasheet Produced by: Adamson, Grant - americas@flowcrete.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

2. Hazard Identification

2.1 Classification of the substance or mixture

STOT, single exposure, category 3, NE

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

dipropylene glycol methyl ether acetate

HAZARD STATEMENTS

STOT, single exposure, category 3, NE

H336

May cause drowsiness or dizziness.

PRECAUTION PHRASES

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

2.3 Other hazards

Not applicable

Results of PBT and vPvB assessment:

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

3. Composition/Information On Ingredients

3.1 Substances

Hazardous Ingredients

| CAS-No. | <u>Chemical Name</u> | <u>%</u> |
|------------|---|----------|
| 88917-22-0 | dipropylene glycol methyl ether acetate | 50-75 |
| 2807-30-9 | 2-(propyloxy)ethanol | 2.5-10 |

| CAS-No. | GHS Symbols | GHS Hazard Statements | M-Factors |
|------------|-------------|-----------------------|-----------|
| 88917-22-0 | GHS07 | H227-336 | 0 |
| 2807-30-9 | GHS07 | H312-319 | 0 |

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Harmful by inhalation. Irritating to eyes. Harmful in contact with skin and if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

Flash back possible over considerable distance. In the event of fire, wear self-contained breathing apparatus. High volume water jet. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

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

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING: Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only in area provided with appropriate exhaust ventilation. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Keep away from sources of ignition - No smoking.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Direct sources of heat.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(US)

Name % OSHAPEL Company TLV

dipropylene glycol methyl ether acetate 50-75 2-(propyloxy)ethanol 2.5-10

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

Appearance:

Odor threshold

RESPIRATORY PROTECTION: Respirator with a vapor filter. Respirator with filter for organic vapor.

EYE PROTECTION: Ensure that eyewash stations and safety showers are close to the workstation location. Safety goggles. Tightly fitting safety goggles.

HAND PROTECTION: Rubber or plastic gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

Clear

Not determined

OTHER PROTECTIVE EQUIPMENT: No Information

9. Physical and Chemical Properties

Upper/lower flammability or explosive

9.1 Information on basic physical and chemical properties

Physical State Liquid

Odor Solvent

pH Non-aqueous

Melting point / freezing point (°C) Not determined

Boiling point/range (°C) N.D. - N.D.

Flash Point, (°C) 86

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Flammability (solid, gas) Not deter

limits

Vapour Pressure, mmHg at 77 F

Vapour density Not determined

Relative density Not determined

Solubility in / Miscibility with water Negligible

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Not determined

Not determined

Not determined

Viscosity

< 150 cPs at 77 F

999 - 0

Explosive properties Not determined

Oxidising properties Not determined

9.2 Other information

 VOC Content g/l:
 150

 Specific Gravity (g/cm3)
 0.120

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under recommended storage conditions. Risk of ignition.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Direct sources of heat.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

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

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No data
Inhalation LC50: No data

Irritation: No information available.

Corrosivity: No information available.

Sensitization: No information available.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

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

CAS-No. Chemical Name Oral LD50 Dermal LD50 Vapor LC50

2807-30-9 2-(propyloxy)ethanol 3089 mg/kg, oral, rat 2132 ppm/6 hours

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential:No information

12.4 Mobility in soil: No information

-

assessment:

12.5

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

12.6 Other adverse effects:No information

CAS-No.Chemical NameEC50 48hrIC50 72hrLC50 96hr88917-22-0dipropylene glycol methyl ether acetateNo informationNo information

2807-30-9 2-(propyloxy)ethanol No information No information

13. Disposal Considerations

Results of PBT and vPvB

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1 UN number

14.2 UN proper shipping nameNot regulated for transport according to ADR/RID, IMDG and IATA

regulations

Technical name

14.3 Transport hazard class(es) N/A

Subsidiary shipping hazard N/A

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user Not applicable

EmS-No.:

14.7 Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC code

Not applicable

15. Regulatory Information

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

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard

Sara Section 313:

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

Chemical NameCAS-No.2-(propyloxy)ethanol2807-30-9

Toxic Substances Control Act:

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

No TSCA components exist in this product.

U.S. Clean Air Act:

EPA Coating Category: Industrial Maintenance Coating

EPA VOC Content Limit (g/l): 450
Product VOC Content (g/l) <150
Thinning Recommendations: None

Application Recommendations: For professional use only.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u> CAS-No.

No Chemical Name Found

Pennsylvania Right-To-Know

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

<u>Chemical Name</u> CAS-No.

No Chemical Name Found

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

^{*} As per the federal EPA definition for coating categories in 40 CFR 59.401.

^{**} Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory

15.2 **Chemical Safety Assessment:**

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

16. Other Information

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

Combustible liquid

H312 Harmful in contact with skin. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

Reasons for revision

This is a new Safety Data Sheet (SDS).

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark

ESIS (The European Chemical Substances Information System), provided by the European Commission Joint Research Centre in Ispra, Italy

Annex VI of the EU Council Directive 67/548/EEC

Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation)

EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission European Union EU US United States

Chemical Abstract Service CAS

EINECS European Inventory of Existing Chemical Substances

Registration, Evaluation, Authorization of Chemicals Regulation REACH

Globally Harmonized System of Classification and Labeling of Chemicals GHS

LTEL Long term exposure limit STEL Short term exposure limit OEL Occupational exposure limit

Parts per million ppm

Milligrams per cubic meter mg/m3 Threshold Limit Value TLV

American Conference of Governmental Industrial Hygienists ACGIH

Occupational Safety & Health Administration OSHA

PEL Permissible Exposure Limits VOC Volatile organic compounds

Grams per liter g/l

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.



Safety Data Sheet prepared to UN GHS Revision 3

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

1.1 Product Identifier 200-SEALUV-B **Revision Date**: 07/28/2014

Product Name: Flowseal UV - Hardener B

Supercedes Date: New SDS

1.2 Relevant identified uses of the substance or mixture and uses

advised against

Hardener for 2 components coatings - Industrial use

1.3 Details of the supplier of the safety data sheet

Manufacturer: Flowcrete North America, Inc.

616 Spring Hill Drive, Suite 100

Spring, TX 77386

americas@flowcrete.com www.flowcreteamericas.com

Tel: (936) 539-6700 Fax: (936) 539-6701

Datasheet Produced by: Anderson, Paul - americas@flowcrete.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 3 STOT, single exposure, category 3, RTI Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

hexamethylene diisocyanate, homopolymer of hdi

HAZARD STATEMENTS

| Acute Toxicity, Inhalation, category 3 | H331 | Toxic if inhaled. |
|--|------|--------------------------------------|
| STOT, single exposure, category 3, RTI | H335 | May cause respiratory irritation. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |

PRECAUTION PHRASES

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in

a position comfortable for breathing.

2.3 Other hazards

Not applicable

Results of PBT and vPvB assessment:

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

3. Composition/Information On Ingredients

3.1 Substances

Hazardous Ingredients

| CAS-No. | <u>Chemical Name</u> | <u>%</u> |
|------------|----------------------------|----------|
| 28182-81-2 | homopolymer of hdi | 50-75 |
| 822-06-0 | hexamethylene diisocyanate | 0.1-1.0 |

| CAS-No. | GHS Symbols | GHS Hazard Statements | M-Factors |
|------------|-------------|------------------------------|-----------|
| 28182-81-2 | GHS07 | H317-332-335 | 0 |
| 822-06-0 | GHS06-GHS08 | H302-315-317-319-330-334-335 | 0 |

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes and respiratory system. Heating or fire can release toxic gas.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. ABC powder. Danger! - water reactive substance. Reacts with water to release toxic gas. May be harmful or fatal if inhaled.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Keep the container open.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

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

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING: Use only in area provided with appropriate exhaust ventilation. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Do not breathe vapours or spray mist. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Keep from any possible contact with water.

STORAGE CONDITIONS: Store in original container. Keep container tightly closed in a dry and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(US)

Name <u>% OSHAPEL Company</u> TLV

homopolymer of hdi 50-75 hexamethylene diisocyanate 0.1-1.0

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with a vapor filter.

EYE PROTECTION: Ensure that eyewash stations and safety showers are close to the workstation location. Tightly fitting safety goggles.

HAND PROTECTION: Nitrile rubber. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Clear / Pale Yellow

Physical State Liquid

Odor Slightly Musty

Odor threshold Not determined

pH Non-aqueous

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C) 382 F - N.D.

Flash Point, (°C) 93

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive 999 - 0

limits

Vapour Pressure, mmHg Approx. 5.2 x 10-9

 Vapour density
 Not determined

 Relative density
 Not determined

Solubility in / Miscibility with water Insoluble, Reacts With Water

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Decomposition temperature (°C)

Not determined

Viscosity 650-750 cPs

Explosive properties Not determined

Oxidising properties Not determined

9.2 Other information

VOC Content g/l: 5

Specific Gravity (g/cm3) 1.130

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Keep from any possible contact with water.

10.5 Incompatible materials

Reacts violently in contact with acids, amines, driers, polymerisation accelerators and easily oxidized materials. Contact with water or moist air liberates irritating gas.

10.6 Hazardous decomposition products

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

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: >10000 mg/kg, oral (rat)

Inhalation LC50: 137-1150 mg/m3, rats (aerosol), 4 hr.

Irritation: Severe eye irritatint capable of inducing corneal injury (rabbit). Moderate skin irritant.

Corrosivity: No information available.

Sensitization: Pulmonary and dermal sensitizer in animals and humans.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

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

CAS-No.Chemical NameOral LD50Dermal LD50Vapor LC50

28182-81-2 homopolymer of hdi 5000 mg/kg, oral, rat 18500 mg/m3/1H inhalation,

rat

822-06-0 hexamethylene diisocyanate 710 mg/kg, oral rat 230 ppm / 4 hrs

Additional Information:

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

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential:No information

12.4 Mobility in soil: No information

assessment:

12.5

Results of PBT and vPvB

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

12.6 Other adverse effects: No information

<u>CAS-No.</u> <u>Chemical Name</u> <u>EC50 48hr</u> <u>IC50 72hr</u> <u>LC50 96hr</u>

28182-81-2 homopolymer of hdi No information No information
822-06-0 hexamethylene diisocyanate No information No information

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1 UN number

14.2 UN proper shipping name

Not regulated for transport according to ADR/RID, IMDG and IATA

regulations

Technical name

14.3 Transport hazard class(es) N/A

Subsidiary shipping hazard N/A

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user Not applicable

EmS-No.:

14.7 Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC code

Not applicable

15. Regulatory Information

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

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA ' Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Reactive Hazard

Sara Section 313:

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

Chemical NameCAS-No.hexamethylene diisocvanate822-06-0

hexamethylene diisocyanate

Toxic Substances Control Act:

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

No TSCA components exist in this product.

U.S. Clean Air Act:

EPA Coating Category: Floor coatings

EPA VOC Content Limit (g/l): 400
Product VOC Content (g/l) 5
Thinning Recommendations: None

Application Recommendations: For professional use only.

^{*} As per the federal EPA definition for coating categories in 40 CFR 59.401.

^{**} Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u> <u>CAS-No.</u>

No Chemical Name Found

Pennsylvania Right-To-Know

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

<u>Chemical Name</u> <u>CAS-No.</u>

No Chemical Name Found

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

No Proposition 65 Carcinogens exist in this product.

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory

15.2 Chemical Safety Assessment:

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

16. Other Information

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

| H302 | Harmful if swallowed. |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |

Reasons for revision

This is a new Safety Data Sheet (SDS).

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark ESIS (The European Chemical Substances Information System), provided by the European Commission Joint Research Centre in Ispra, Italy

Annex VI of the EU Council Directive 67/548/EEC

Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of

substances and mixtures (CLP Regulation)

EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter
TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.