

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : Hydrophilic Coating Formula B
Product code : includes versions 8-63, 8-3c, 10-125

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

Use of the substance/mixture : Coating

1.3. Details of the supplier of the safety data sheet

Coatings2Go
399 Concord Street
Carlisle MA, 01741 - USA
T 1-978-369-7411 - F 978-371-9940
info@coatings2go.com - COATINGS2GO.COM

1.4. Emergency telephone number

Emergency number : 1-978-369-7411

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Repr. 1B H360

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H360 - May damage fertility or the unborn child

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P308 + P313 - If exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/container to approved facilities in accordance with local/regional/national regulations

2.3. Other hazards

Other hazards not contributing to the classification : Not expected to produce significant adverse health effects when the recommended instruction for use are followed.

2.4. Unknown acute toxicity (GHS-US)

10% of this product is of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

| Name | Product identifier | % | GHS-US classification * |
|---|--------------------|---------|---|
| N-methyl-2-pyrrolidone (Constituent) | (CAS No) 872-50-4 | 1.0-2.0 | Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 1B, H360 STOT SE 3, H335 |

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This product contains an amine neutralizing agent which is bond in the matrix of this product as a salt. This amine salt is considered essentially unreactive at room temperature. Generation of amine vapors is expected when this product is processed (heated) during the drying/hardening of the coating

| <u>Other Ingredients</u> | <u>Components</u> |
|--------------------------------|-------------------------------|
| <u>Weight Percent</u> 0.21% | N,N-Diethylethanamine as salt |

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|---|
| First-aid measures after inhalation | : Remove victim to fresh air. If a cough or other respiratory symptoms develop, consult medical personnel. |
| First-aid measures after skin contact | : Wash skin thoroughly with soap and water. If irritation develops seek medical attention. |
| First-aid measures after eye contact | : IF IN EYES: Rinse cautiously with water for several minutes. If irritation develops seek medical attention. |
| First-aid measures after ingestion | : DO NOT INDUCE VOMITING. Immediately rinse mouth and drink plenty of water. Seek medical attention. Never give anything by mouth to an unconscious person. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|--|---|
| Acute Symptoms/injuries after inhalation | : Based upon the classification of this product and similar product no significant symptoms are expected. Inhalation of vapours may cause mild respiratory irritation. |
| Acute Symptoms/injuries after skin contact | : Based upon the classification of this product and similar product no significant symptoms are expected. This product may cause mild skin irritation based on similar materials. |
| Acute Symptoms/injuries after eye contact | : Based upon the classification of this product and similar product no significant symptoms are expected. This product may cause mild eye irritation based upon similar materials. Liquid may produce irritation experienced as excess redness and swelling of the conjunctiva. |
| Acute Symptoms/injuries after ingestion | : Based upon the classification of this product and similar product no significant symptoms are expected. May be harmful if swallowed. |
| Chronic symptoms | : Repeated chronic exposure to organic solvents has been associated with central nervous system damage including memory loss and kidney and liver damage. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|------------------------------|--|
| Suitable extinguishing media | : Use water fog, foam carbon dioxide dry chemical, halogenated agents. |
|------------------------------|--|

5.2. Special hazards arising from the substance or mixture

| | |
|------------------|--|
| Fire hazard | : Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx). |
| Explosion hazard | : Not determined. |

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Firefighting instructions | : The material will not support combustion unless the water has evaporated. |
| Protection during firefighting | : Wear self-contained breathing apparatus with full facepiece and full protective clothing. If contact occurs with material or its solutions, immediately flush with water and remove contaminated clothing. |
| Other information | : Irritating and highly toxic gases may be generated by thermal decomposition or combustion in a fire. Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NOx). |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|---|
| General measures | : No action shall be taken involving any personal risk without suitable training. |
|------------------|---|

6.1.1. For non-emergency personnel

| | |
|----------------------|---|
| Protective equipment | : Wear skin, eye and respiratory protection during cleanup. Floors may become slippery if spilled. Avoid breathing vapors. |
| Emergency procedures | : Evacuate unnecessary personnel. Do not touch or walk through spilled material. Use personal protective equipment as required. |

6.1.2. For emergency responders

| | |
|----------------------|--|
| Protective equipment | : Wear skin, eye and respiratory protection during cleanup. Floors may become slippery if spilled. |
|----------------------|--|

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Emergency procedures : Avoid breathing vapors. Ventilate area. Wear recommended personal protective equipment.

6.2. Environmental precautions

Clean up any spills as soon as possible, using an absorbent material to collect it. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Refer to all applicable national, international and local regulations or provisions.

6.3. Methods and material for containment and cleaning up

For containment : Stop spill if without risk. Move containers from spill area. Clean up any spills as soon as possible, using an absorbent material to collect it.

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

Other information : Collect all waste in suitable and labelled containers and dispose according to local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Use only with adequate ventilation.

Precautions for safe handling : This product which contains an aqueous dispersion of a polymer may be difficult to remove without injuring the skin if allowed to dry. Do not eat, drink or smoke when using this product.

Hygiene measures : Eyewash station and safety shower are recommended in work area. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove/Take off immediately all contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep from freezing. Store, if possible, in a cool, well ventilated place away from incompatible materials. Store away from direct sunlight or other heat sources. Store at temperatures above 0 °C. Store in a well-ventilated place. Keep container tightly closed.

Incompatible materials : Strong acids. amines.

Storage temperature : > 0 °C

Storage area : Store tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Hydrophilic Coating Formula B | | |
|--|-------------------------|----------------------------------|
| No ACGIH, TLV or OSHA PEL is assigned to this mixture. | | |
| | | |
| N-methyl-2-pyrrolidone (872-50-4) | | |
| USA ACGIH | ACGIH TWA (ppm) | 10 ppm |
| USA ACGIH | Remark (ACGIH) | Can be absorbed through the skin |
| Tiethylamine (121-44-8_ | | |
| USA ACGIH | ACGIH TWA (mg/m3) | 4.1 mg/m3 |
| USA ACGIH | ACGIH TWA (ppm) | 1 ppm |
| USA ACGIH | ACGIH STEL (g/m3) | 12.4 mg/m3 |
| USA ACGIH | ACIH STEL (ppm) | 3 ppm |
| USA OSHA | OSHA PEL (TWA) (mg/m3) | 100 mg/m3 |
| USA OSHA | OSHA PEL (TWA) (ppm) | 25 ppm |
| USA OSHA | OSHA PEL (STEL) (mg/m3) | 60 mg/m3 |
| USA OSHA | OSHA PEL (STEL) (ppm) | 15 ppm |

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8.2. Exposure controls

Personal protective equipment : Personal protective equipment should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling the product. Gloves. Safety glasses. chemical resistant apron. Insufficient ventilation: wear respiratory protection.



Materials for protective clothing : Nitrile rubber.

Hand protection : Wear suitable gloves resistant to chemical penetration.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. . Safety glasses with side-shields. Face shield if splashing is possible.

Skin and body protection : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Respiratory protection : Local exhaust or breathing protection. If needed, a NIOSH certified respirator for organic vapors, mists and fumes is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Translucent. Viscous.

Colour : Milky

Odour : Mild amine

Odour threshold : No data available

pH : 7.5 - 9.5

Relative evaporation rate (butylacetate=1) : < 1

Melting point : No data available

Freezing point : No data available

Boiling point : > 100 °C

Flash point : > 100 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Density : ~1.05 g/ml

Solubility : Miscible with water.

Log Pow : No data available

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

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10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

Keep from freezing.

10.5. Incompatible materials

Strong acids. amines.

10.6. Hazardous decomposition products

Carbon oxides (CO and CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Hydrophilic Coating Formula B

| | |
|--|---|
| Acute toxicity | : Not classified (Based on available data, the classification criteria are not met) |
| Skin corrosion/irritation | : Not classified (Based on available data, the classification criteria are not met) |
| Serious eye damage/irritation | : Not classified (Based on available data, the classification criteria are not met) |
| Respiratory or skin sensitisation | : Not classified (Based on available data, the classification criteria are not met) |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met) |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met) |
| Reproductive toxicity | : May damage fertility or the unborn child. |
| Specific target organ toxicity (single exposure) | : Not classified (Based on available data, the classification criteria are not met) |
| Specific target organ toxicity (repeated exposure) | : Not classified (Based on available data, the classification criteria are not met) |
| Aspiration hazard | : Not classified (Based on available data, the classification criteria are not met) |
| Other information | : Likely routes of exposure: inhalation, skin and eye. |

N-methyl-2-pyrrolidone (872-50-4)

| | |
|--------------------------------------|--|
| LD50 oral mouse | 5130 mg/kg |
| LD50 dermal rabbit | 8000 mg/kg |
| LC50 inhalation rat (ppm) | > 5100 ppm/4h |
| ATE US (oral) | 3914.00000000 mg/kg bodyweight |
| ATE US (dermal) | 8000.00000000 mg/kg bodyweight |
| Skin corrosion/irritation | May cause skin irritation. |
| Serious eye damage/irritation | May cause eye irritation |
| Respiratory or skin sensitisation | Causes respiratory tract irritation. Material has a very low vapor pressure at room temperature so inhalation exposures are not expected unless material is heated or misted. |
| Germ cell mutagenicity | Possible effects observed |
| Carcinogenicity | Not listed as a carcinogen by ACGIH, IARC, NTP or CA Prop 65 |
| Reproductive toxicity | Possible effects observed |
| Teratogenicity | Proposition 65 maximum allowable dose level for developmental toxicity is 3200 ug/day for the inhalation route and 17000 ug/day for the dermal route |
| Aspiration hazard | Not Classified |
| Other information: Chronic Exposure: | Prolonged or repeated exposure may cause dermatitis. Adverse reproductive effects have been reported in animals. Testicular effects were noted in rats after repeated, high dose oral and inhalation exposures (BASF). |

Triethylamine (N,N'-Diethylethanamine) (121-44-8)

| | |
|----------------------------|-------------|
| LD50 oral rat | 730 mg/kg |
| LD50 dermal rabbit | 580 mg/kg |
| LC50 inhalation rat (mg/l) | 7.1 mg/l/4h |

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SECTION 12: Ecological information

12.1. Toxicity

Hydrophilic Coating Formula B

No Data Available for Environmental Toxicity

N-methyl-2-pyrrolidone (872-50-4)

LC50 fishes 1 > 4000 mg/l Gold orfe - 96 h

EC50 Daphnia 1 > 4897 mg/l 48 h

EC50 Bacteria > 9000 mg/l - 48 h

Triethylamine (N,N'-Diethylethanamine) 121-44-8

LC50 fishes 43.7 mg/l Pimephales promelas – 96h

LC50 Daphnia 200 mg/l 48h

LC50 Fish 2 150 mg/l Oncorhynchus mykiss

LOEC (chronic) 3202 mg/l Danio rerio – 7d

12.2. Persistence and degradability

Hydrophilic Coating Formula B

Persistence and degradability Not available.

N-methyl-2-pyrrolidone (872-50-4)

Persistence and degradability Not available.

12.3. Bioaccumulative potential

Hydrophilic Coating Formula B

Log Pow Not Available

N-methyl-2-pyrrolidone (872-50-4)

Log Pow -0.046

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Collect all waste in suitable and labelled containers and dispose according to local legislation.

Waste disposal recommendations : This material and its container must be disposed of in a safe way, and as per local legislation.

Additional information : Not considered hazardous under US RCRA regulations. Empty containers contain product residue. Observe all hazard precautions. Remove all product residue from container and puncture or otherwise destroy the empty container before disposal. Do not distribute, furnish or reuse empty containers except for storage and shipment of original product.

SECTION 14: Transport information

DOT

Transport document description : Not regulated

DOT NA no. : Not regulated

DOT Proper Shipping Name : Not regulated

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

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Class (ADR) : Not regulated
Danger labels (ADR) : Not applicable

Transport by sea

Class (IMDG) : Not subject

Air transport

Class (IATA) : Not subject

SECTION 15: Regulatory information

15.1. US Federal regulations

| Hydrophilic Coating Formula B | |
|-------------------------------------|--|
| EPA TSCA Regulatory Flag | All components are included or exempt from listing on the TSCA Inventory of Chemical Substances. |
| SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard Delayed (chronic) health hazard |
| SARA Section 313 | N-Methyl-2-Pyrrolidone (CAS# 972-50-4) : 1-2% |

15.2. International regulations

CANADA

All components of this product are listed on the Canada Domestic Substances List (DSL).

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.3. US State regulations

N-methyl-2-pyrrolidone (872-50-4)

| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significance risk level (NSRL) |
|---|---|---|---|-----------------------------------|
| | Yes | | | |

SECTION 16: Other information

Revision date : 03/20/2020
Data sources : Previous SDS. Supplier SDS.
Training advice : Educate and train employees in the safe use and handling of this product. Follow all label instructions.
HMIS III Rating
Health : 1* Slight hazard, chronic effect
Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard
Personal Protection : X

The information contained in this Material Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications. We assigned HMIS ratings to this product based on the hazard(s) of its ingredients.

SDS US (GHS HazCom 2012)

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