SECTION 1: IDENTIFICATION OF SUBSTANCE/COMPANY

1.1 Product identifier

Product Name: Admithane 933HB Part A
Product Code: A933
Product Type: Acrylic polyurethane with a high-build, eggshell finish.

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

Field of application: Steel structure, piping and equipment. Exterior application.
Identified uses: Steel structure, pipe rack, piping, valves, ladder, handrails, pumps, storage tank exteriors, compressors, up to 121°C.

1.3 Details of the publisher of the safety data sheet

Company details:

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition: Mixture, 2 components

GHS Classification
FLAMMABLE LIQUID AND VAPOR – Category 3
SKIN SENSITIZER – Category 1
SKIN CORROSION/IRRITATION – Category 2
SERIOUS EYE DAMAGE/EYE IRRITATION – Category 2A
SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE – Category 3
RESPIRATORY TRACT IRRITATION – Category 3
CARCINOGENICITY – Category 2
SPECIFIC TARGET ORGAN TOXICITY SINGLE EXPOSURE – Category 1

2.2 Label elements

Hazard pictograms:

Signal word: Danger
Hazard statements: H226 – Flammable liquid and vapor.
H315 – Causes skin irritation.

H317 – May cause an allergic skin reaction.
H319 – Causes serious eye irritation.
H335 – May cause respiratory irritation.
H351 – Suspected of causing cancer.
H370 – Causes damage to organs.

Chemical name on label: Xylene

Precautionary statements: P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 – Avoid breathing dust/fumes/gas/mist/vapors/spray.

P280 – Wear protective gloves/protective clothing/eye protection/face protection.

P284 – In case of inadequate ventilation, wear respiratory protection.

P302+352 – IF ON SKIN: Wash with plenty of water.

P304+340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing.

P308+313 – IF exposed: Call a POISON CENTER or doctor/physician.

P332+313 – IF skin irritation occurs: Get medical advice/attention.

P333+313 – If skin irritation or a rash occurs: Get medical advice/attention.

P391 – Collect spillage.

P403+233 – Store in a well-ventilated place. Keep container tightly closed.

P405 – Store locked up.

P501 – Dispose of contents/container to… [… in accordance with local/regional/national/international regulation (**to be specified**)].

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product/Ingredient Name	Identifiers	%	GHS Classification
Microcrystalline silica	14808-60-7	<20	H350-370
Titanium Dioxide	13463-67-7	<40	-
Carbon Black	1333-86-4	<6	H351
Xylene	1330-20-7	<25	H226-315-401
n-Butyl Acetate	126-86-4	<10	H226-336
Cellosolve acetate	111-15-9	<5	H226-302-312-332-360
Acrylic polyol resin	N/A	<70	-

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Give oxygen or artificial respiration if needed. Remove to fresh air. If signs/symptoms continue, get medical attention.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs by aspiration. Vapors may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media: CO_2, dry chemical, foam, water fog.

Unusual fire and explosion hazards: Flammable liquid. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

5.2 Special hazards arising from the substance or mixture

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. Cool containers/tanks with water spray. Flammable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8. Ensure adequate ventilation. Ensure adequate ventilation. Evacuate personnel to safe areas. Evacuate personnel to safe areas. Remove all sources of ignition. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

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). 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.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Instructions for safe handling: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapors or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

Protection and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. 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: Heat, flames, and sparks.

Storage conditions: Keep container closed when not in use. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product/ingredient name	Identifiers	%	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA
Microcrystalline silica	14808-60-7	<20	0.025mg/m^3	N/A	0.1mg/m^3
Titanium Dioxide	13463-67-7	<40	10mg/m^3	N/A	10mg/m^3
Carbon Black	1333-86-4	<6	3mg/m^3	N/A	3.5mg/m^3
Xylene	1330-20-7	<25	100ppm	N/A	435mg/m^3, 100ppm
n-Butyl Acetate	126-86-4	<10	150ppm	200ppm	710mg/m^3, 150ppm
Cellosolve acetate	111-15-9	<5	5ppm	N/A	540mg/m^3
Acrylic polyol resin	N/A	<70	N/A	N/A	N/A

8.2 Exposure controls

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering

modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

8.3 Individual protection measures

Hygiene:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Wear suitable gloves tested to EN374. May be used, gloves (breakthrough time) 4 - 8 hours: PVC, nitrile rubber Recommended, gloves (breakthrough time) > 8 hours: 4H, fluor rubber, Viton®, neoprene, butyl rubber.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks

	involved and should be approved by a specialist before handling this product.
Respiratory protection:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance/color:	Solid color liquid
Odor:	Characteristic
Solubility in water:	Negligible
Specific gravity:	1.00-1.35
Vapor density:	Heavier than air
Evaporation rate:	Slower than ether
Flash point:	27°C

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Heat, flames, and sparks.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous decomposition will not form during normal storage. Carbon monoxide and Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Irritation:	Unknown

Corrosivity: Unknown

Sensitization: Unknown

Repeated dose toxicity: Unknown

Carcinogenicity: Unknown

Mutagenicity: Unknown

Toxicity for reproduction: Unknown

The individual component data is tabulated below:

Product/ingredient name	Identifiers	Oral LD50	Dermal LD50	Vapor LC50
Microcrystalline silica	14808-60-7	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	25000mg/m^3, rat, oral	N/A	N/A
Carbon Black	1333-86-4	8000mg/kg, rat, oral	N/A	N/A
Xylene	1330-20-7	8600mg/kg, rat	4200mg/kg, rabbit	29mg/l, 4hrs, rat
n-Butyl Acetate	126-86-4	14130mg/kg, rat, oral	>16ml/kg, rabbit	N/A
Cellosolve acetate	111-15-9	2700mg/kg, rat	10000mg/kg, rabbit	12.1mg/l, 8hrs, rat
Acrylic polyol resin	N/A	N/A	N/A	N/A

Additional information: Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapors may cause drowsiness and dizziness.

SECTION 12: ECOLOGICAL INFORMATION

Product/ingredient name	Identifiers	EC50 48hr	IC50 72hr	LC50 96hr
Microcrystalline silica	14808-60-7	N/A	N/A	N/A
Titanium Dioxide	13463-67-7	N/A	N/A	N/A
Carbon Black	1333-86-4	N/A	N/A	N/A
Xylene	1330-20-7	N/A	N/A	N/A
n-Butyl Acetate	126-86-4	N/A	N/A	18mg/l, fish
Cellosolve acetate	111-15-9	354mg/l	N/A	41mg/l
Acrylic polyol resin	N/A	N/A	N/A	N/A

SECTION 13: DISPOSAL INFORMATION

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers, do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste. Do not burn, or use a cutting torch on, the empty drum. If

recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

Shipment name:	Paint
UN number:	1263
Class:	3
Label:	
Sub-risk:	-
Packing group:	III
Environmental hazards:	Yes

SECTION 15: REGULATORY INFORMATION

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:

Flammable: 

Harmful: 

Product/ingredient name	Identifier
Xylene	1330-20-7
Titanium dioxide	13463-67-7
Black carbon	1333-86-4

SECTION 16: OTHER INFORMATION

H226:	Flammable liquid and vapor.
H302:	Harmful if swallowed.
H312:	Harmful in contact with skin.
H332:	Harmful if inhaled.
H336:	May cause drowsiness or dizziness.
H350:	May cause drowsiness or dizziness.
H351:	Suspected of causing cancer.
H360:	May damage fertility or the unborn child.
H370:	Causes damage to organs.
H401:	Toxic to aquatic life.

This information is provided without any warranty, representation, reference or license, with hope that the data is accurate to the best of Admiral's knowledge, and from sources trusted by Admiral, and is intended to describe this product for health, safety and environmental purposes only. Admiral assumes no legal

responsibility for the use of or reliance on the same. Customers are encouraged to carry out their own tests. Before using any product, read the label.

SECTION 1: IDENTIFICATION OF SUBSTANCE/COMPANY

1.1 Product identifier

Product Name: Admithane 933HB Part B
Product Code: A933
Product Type: Curing agent for Admithane 933HB Part A

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

Field of application: Steel structure, piping and equipment. Exterior application.
Identified uses: Steel structure, pipe rack, piping, valves, ladder, handrails, pumps, storage tank exteriors, compressors, up to 121°C.

1.3 Details of the publisher of the safety data sheet

Company details:

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Bekasi, Jawa Barat 17530
Indonesia
Tel: +622189841424/+622189841425
customerservice@mppi.co.id

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition: Substance, 2 components

GHS Classification
RESPIRATORY SENSITIZATION – Category 1A
SKIN SENSITIZATION – Category 1A
SERIOUS EYE DAMAGE/EYE IRRITATION – Category 2/2A
FLAMMABLE LIQUIDS – Category 3

2.2 Label elements

Hazard pictograms:

Signal word: Danger.
Hazard statements: H226 – Flammable liquid and vapor.
H317 – May cause an allergic skin reaction.
H319 – Causes serious eye irritation.
H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Chemical name on label: Xylene, N-Butyl acetate, ethylbenzene.

Precautionary statements: P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 – Keep container tightly closed.

P240 – Ground/bond container and receiving equipment.

P241 – Use explosion-proof electrical/ventilating/light/…/equipment.

P242 – Use only non-sparking tools.

P243 – Take precautionary measures against static discharge.

P260 – Do not breathe dust/fumes/gas/mist/vapors/spray.

P261 – Avoid breathing dust/fumes/gas/mist/vapors/spray.

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

P303+361+353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P338 – Remove contact lenses if present and easy to do. Continue rinsing.

P351 – Rinse cautiously with water for several minutes.

P353 – Rinse skin with water/shower.

P361 – Take off immediately all contaminated clothing.

P391 – Collect spillage.

P403+233 – Store in a well-ventilated place. Keep container tightly closed.

P405 – Store locked up.

P501 – Dispose of contents/container to… [… in accordance with local/regional/national/international regulation (**to be specified**)].

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product/Ingredient Name	Identifiers	%	GHS Classification
Hexane, 1,6-Diisocyanato-, homopolymer	28182-81-2	>75	H317-319
Butyl acetate	123-86-4	12.5	H226-336
Xylene	1330-20-7	12.5	H335-319-312-315-304-332-373-226
Hexamethylene diisocyanato	822-06-0	<0.3	H315-317-319-331-334

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Give oxygen or artificial respiration if needed. Remove to fresh air. If signs/symptoms continue, get medical attention.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs by aspiration. Vapors may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

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

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media: CO_2, dry chemical, foam, water fog.

Unusual fire and explosion hazards: Flammable liquid. Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source. Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapor in air and avoid vapor concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

5.2 Special hazards arising from the substance or mixture

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. Cool containers/tanks with water spray. Flammable.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8. Ensure adequate ventilation. Ensure adequate ventilation. Evacuate personnel to safe areas. Evacuate personnel to safe areas. Remove all sources of ignition. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Wear personal protective equipment.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

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). 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.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Instructions for safe handling: Keep containers dry and tightly closed to avoid moisture absorption and contamination. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapors or spray mist. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation/personal protection.

Protection and hygiene measures: Handle in accordance with good industrial hygiene and safety practice. 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: Heat, flames, and sparks.

Storage conditions: Keep container closed when not in use. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product/ingredient name	Identifiers	%	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA
Hexane, 1,6-Diisocyanato-, homopolymer	28182-81-2	>75	N/A	N/A	N/A
Butyl acetate	123-86-4	12.5	150ppm	200ppm	150ppm
Xylene	1330-20-7	12.5	100ppm	N/A	435mg/m^3, 100ppm
Hexamethylene diisocyanato	822-06-0	<0.3	N/A	N/A	N/A

8.2 Exposure controls

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

8.3 Individual protection measures

Hygiene:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Wear suitable gloves tested to EN374. May be used, gloves (breakthrough time) 4 - 8 hours: PVC, nitrile rubber Recommended, gloves (breakthrough time) > 8 hours: 4H, fluor rubber, Viton®, neoprene, butyl rubber.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance/color:	Clear, pale yellow liquid
Odor:	Fruit solvent like
Solubility in water:	Negligible
Specific gravity:	1.05-1.07
Vapor density:	N/A
Evaporation rate:	N/A
Flash point:	33°C

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur. Hazardous reactions contact with moisture, other materials that react with isocyanates, or temperatures above 350°F (177°C), may cause polymerization, moisture water and high humidity or high-heat temperatures greater than 350°F (177°C) can cause pressure build-up with possible explosive rupture.

10.4 Conditions to avoid

Heat, flames, and sparks.

10.5 Incompatible materials

Strong oxidizing agents, water, amines, strong bases, alcohols, copper alloys.

10.6 Hazardous decomposition products

Hazardous decomposition will not form during normal storage. By fire and heat: Nitrogen oxide, Dense black smoke, Carbon monoxide, Carbon dioxide, Hydrogen cyanide, Isocyanate, Isocyanic acid, other undetermined compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Irritation:	Unknown
Corrosivity:	Unknown
Sensitization:	Unknown
Repeated dose toxicity:	Unknown
Carcinogenicity:	Unknown
Mutagenicity:	Unknown
Toxicity for reproduction:	Unknown

The individual component data is tabulated below:

Product/ingredient name	Identifiers	Oral LD50	Dermal LD50	Vapor LC50
Hexane, 1,6-Diisocyanato-, homopolymer	28182-81-2	>5000mg/kg, rat, oral	2000mg/kg, rabbit	>1.18mg/l, rat
Butyl acetate	123-86-4	10768mg/kg, rat, oral	17000mg/kg, rabbit	2000ppm, 4hrs, rat
Xylene	1330-20-7	4300mg/kg, rat, oral	1700mg/kg, rabbit	5000ppm, 4hrs, rat
Hexamethylene diisocyanato	822-06-0	N/A	N/A	N/A

Additional information: Harmful if swallowed. Irritating to eyes and skin. Risk of serious damage to the lungs (by aspiration). Vapors may cause drowsiness and dizziness.

SECTION 12: ECOLOGICAL INFORMATION

Product/ingredient name	Identifiers	EC50 48hr	IC50 72hr	LC50 96hr
Hexane, 1,6-Diisocyanato-, homopolymer	28182-81-2	N/A	N/A	N/A
Butyl acetate	123-86-4	648mg/l, algae	N/A	18mg/l, fish
Xylene	1330-20-7	N/A	N/A	N/A
Hexamethylene diisocyanato	822-06-0	N/A	N/A	N/A

SECTION 13: DISPOSAL INFORMATION

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container

must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers, do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste. Do not burn, or use a cutting torch on, the empty drum. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of in accordance with local regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

Shipment name:	Resin solution
UN number:	1866
Class:	3
Label:	
Sub-risk:	-
Packing group:	III
Environmental hazards:	-

SECTION 15: REGULATORY INFORMATION

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:

Flammable: 

Harmful: 

Hazardous to aquatic environment: 

Product/ingredient name	Identifier
Hexane, 1,6-Diisocyanato-, homopolymer	28182-81-2
Butyl acetate	123-86-4
Xylene	1330-20-7

SECTION 16: OTHER INFORMATION

H304:	May be fatal if swallowed and enters airways.
H312:	Harmful in contact with skin.
H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H319:	Causes serious eye irritation.
H331:	Toxic if inhaled.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.
H336:	May cause drowsiness or dizziness.
H373:	May cause damage to organs through prolonged or repeated exposure.

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