

KIT - SAFETY DATA SHEET

Product identifier used on the

Kit Name DEVCON® HP250 (2:1 ratio) straw - use DA091 2:1 plunger

14315 Stock No.:

Other means of identification:

 $\underline{\textbf{Recommended use of the chemical and restrictions on use:}}$

Chemical manufacturer address and telephone number:

Manufacturer Name: ITW Polymers Adhesives, North America

30 Endicott Street Danvers, MA 01923

Component list		
Component A	HP250 HI-PERFORMANCE ADHESIVE RESIN	
Component B	HP 250 HI-PERFORMANCE ADHESIVE HARDENER	
Kit SDS Revision Date	07/30/2015	

Component A - SDS

SECTION 1: IDENTIFICATION

Product identifier used on the label:

Product Name: **HP250 HI-PERFORMANCE ADHESIVE RESIN**

Other means of identification:

Synonyms: None.

Recommended use of the chemical and restrictions on use: Product Use/Restriction: Not applicable.

 $\underline{\hbox{Chemical manufacturer address and telephone number:}}\\$

Manufacturer Name: ITW

30 Endicott Street Danvers, MA 01923 (978) 777-1100

General Phone Number:

Emergency phone number: (800) 424-9300 Emergency Phone Number:

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:



Signal Word: DANGER.

GHS Class: Serious Eve Damage, category 1. Skin Irritation. Category 2.

Skin Sensitization. category 1. Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

H318 - Causes serious eye damage. H315 - Causes skin irritation. Hazard Statements:

H317 - May cause an allergic skin reaction. H335 - May cause respiratory irritation.

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. Precautionary Statements:

P264 - Wash hands thoroughly after handling.
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/protective clothing/eye protection/face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P321 - Specific treatment (see ... on this label).

P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may Eye:

cause lacrimation, conjunctivitis, corneal damage and permanent injury

Skin: Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible.

May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this

material.

Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs: Eyes. Skin. Respiratory system. Digestive system

Aggravation of Pre-Existing Conditions: Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Elastomer Modified Diglycidyl Ether	68909-14-8	1 - 10 by weight	
Neopentyl glycol diglycidyl ether	17557-23-2	1 - 10 by weight	
Bisphenol A diglycidyl ether resin	25068-38-6	50 - 60 by weight	
Amorphous silicon dioxide	67762-90-7	1 - 10 by weight	
Phenol, polymer with formaldehyde, glycidyl ether	28064-14-4	10 - 20 by weight	
Proprietary ingredient(s)	Trade Secret	10 - 20 by weight	

SECTION 4: FIRST AID MEASURES

Description of necessary measures:

Inhalation:

Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of Eye Contact:

the eyes by separating the eyelids with fingers. Get immediate medical attention

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.

If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give Ingestion:

SECTION 5 : FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.

Unsuitable extinguishing media: Water or foam may cause frothing.

Unusual Fire Hazards: Sealed containers at elevated temperatures may rupture explosively and spread fire due to

polymerization. Heating above 300 deg F in the presence of air may cause slow oxidative decomposition and above 500 deg F may cause polymerization.

 $\underline{\hbox{Special protective equipment and precautions for fire-fighters:}}\\$

Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent)

Fire Fighting Instructions: Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to

minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible,

contain fire run-off water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal protective Spill Cleanup Measures:

equipment as listed in Section 8.

Reference to other sections:

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7: HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist.

Hygiene Practices: Wash thoroughly after handling.

Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured Special Handling Procedures:

product.

 $\underline{\text{Conditions for safe storage, including any incompatibilities:}}\\$

Storage: Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep

container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other

engineering controls to control airborne levels below recommended exposure limits. Good general engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eve/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye

and face protection regulation, or the European standard EN 166.

Skin Protection Description: Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be Respiratory Protection:

permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station. Other Protective:

Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance: Viscous. Liquid.

Boiling Point: Not determined. Meltina Point: Not determined.

Specific Gravity:

Solubility: Not determined. Vapor Density: >1 (air = 1)

Vapor Pressure: Not determined.

Percent Volatile:

Not determined. Evaporation Rate:

Neutral. Molecular Formula: Mixture Molecular Weight: Mixture

Flash Point: >200°F (93.3°C) Flash Point Method: Estimated. Lower Flammable/Explosive Limit: Not determined. Upper Flammable/Explosive Limit: Not determined. Auto Ignition Temperature: Not determined.

VOC Content: 0 q/L

9.2. Other information:

Percent Solids by Weight 100

SECTION 10: STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures.

 $\underline{\textit{Possibility of hazardous reactions:}}$

Hazardous Polymerization: Not reported.

Conditions To Avoid:

Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.

Heating resin above 300 F in the presence of air may cause slow oxidative decomposition

Incompatible Materials:

Incompatible Materials: Strong Lewis or mineral acids, strong oxidizing agents, strong mineral and organic bases (especially primary and secondary aliphatic amines).

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Neopentyl glycol diglycidyl ether:

Oral - Rat LD50 - Lethal dose, 50 percent kill: 4500 mg/kg [Details of toxic effects not reported other Ingestion:

than lethal dose value] (RTECS)

Bisphenol A diglycidyl ether resin:

Administration into the eye - Rabbit Standard Draize test: 100 mg [Mild] Administration into the eye - Rabbit Standard Draize test: 20 mg/24H [Moderate] Administration into the eye - Rabbit Standard Draize test: 5 mg/24H [Severe] (RTECS)

Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >20 mL/kg [Details of toxic

Administration onto the skin - Rat LD50 - Lethal dose, 50 percent kill: >1200 mg/kg [Details of toxic

effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 10700 uL/kg [Details of toxic effects not reported other

Oral - Rat LD50 - Lethal dose, 50 percent kill: 13600 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 13.6 gm/kg [Details of toxic effects not reported other

than lethal dose value]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 11.4 gm/kg [Details of toxic effects not reported other

than lethal dose value]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Behavioral - Somnolence (general depressed

activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic - Weight loss or decreased weight gain]

Oral - Rat LD50 - Lethal dose, 50 percent kill: 30 gm/kg [Details of toxic effects not reported other than lethal dose value]
Oral - Rat LD50 - Lethal dose, 50 percent kill: >1 gm/kg [Details of toxic effects not reported other

than lethal dose value]
Oral - Rat LD50 - Lethal dose, 50 percent kill: 11400 mg/kg [Behavioral - Somnolence (general depressed activity) Lungs, Thorax, or Respiration - Dyspnea Nutritional and Gross Metabolic (RTECS)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product. Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal: Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous

waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local

auidelines.

RCRA Number: Not determined.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Refer to Bill of Lading
DOT UN Number: Refer to Bill of Lading

IATA Shipping Name: Refer to Bill of Lading
IATA UN Number: Refer to Bill of Lading

IMDG UN Number: Refer to Bill of Lading

IMDG Shipping Name: Refer to Bill of Lading

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Elastomer Modified Diglycidyl Ether:

TSCA Inventory Status: Listed
Canada DSL: Listed

Neopentyl glycol diglycidyl ether:

TSCA Inventory Status: Listed
Canada DSL: Listed

Bisphenol A diglycidyl ether resin:

TSCA Inventory Status: Listed
Canada DSL: Listed

Amorphous silicon dioxide:

TSCA Inventory Status: Listed
Canada DSL: Listed

Phenol, polymer with formaldehyde, glycidyl ether:

TSCA Inventory Status: Listed
Canada DSL: Listed

Canadian Regulations. WHMIS Hazard Class(es): D2B

WHMIS Pictograms:



SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 2*
HMIS Fire Hazard: 1
HMIS Reactivity: 1
HMIS Personal Protection: X

Health Hazard	2*
Fire Hazard	1
Reactivity	1
Personal Protection	х

^{*} Chronic Health Effects

SDS Revision Date: January 30, 2015
SDS Revision Notes: GHS Update

SDS Format: In accordance to OSHA GHS 1910.1200

SDS Author: Actio Corporation

Disclaimer: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW

Polymers Adhesives, NA, MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the ITW Polymers Adhesives, NA product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a ITW Polymers Adhesives, NA product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the ITW Polymers Adhesives, NA product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ITW Polymers Adhesives, NA provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this

Copyright© 1996-2015 Actio Corporation. All Rights Reserved.

Component B - SDS

SECTION 1: IDENTIFICATION

Product identifier used on the label:

Product Name: HP 250 HI-PERFORMANCE ADHESIVE HARDENER

 $\underline{\hbox{Other means of identification:}}$

Synonyms: None.

Recommended use of the chemical and restrictions on use: Product Use/Restriction: Not applicable.

Chemical manufacturer address and telephone number:

Manufacturer Name:

30 Endicott Street Danvers, MA 01923

(978) 777-1100

Emergency phone number:

General Phone Number:

(800) 424-9300 Emergency Phone Number:

CHEMTREC: For emergencies in the US, call CHEMTREC: 800-424-9300

SECTION 2: HAZARD(S) IDENTIFICATION

Classification of the chemical in accordance with CFR 1910.1200(d)(f):

GHS Pictograms:









Signal Word: DANGER.

GHS Class: Acute Inhalation Toxicity. Category 2.

Serious Eye Damage. category 1 Skin corrosion. category 1. Skin Sensitization. category 1.
Skin Sensitization. category 1.
Acute Oral Toxicity. Category 4.
Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

Hazard Statements: H330 - Fatal if inhaled.

H318 - Causes serious eye damage. H314 - Causes severe skin burns and eye damage.

H361 - Suspected of damaging fertility or the unborn child. H317 - May cause an allergic skin reaction. H302 - Harmful if swallowed.

H335 - May cause respiratory irritation

Precautionary Statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.

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

P284 - In case of inadequate ventilation wear respiratory protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minuif present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P310 - Immediately call a POISON CENTER or doctor/physician.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P320 - Specific treatment is urgent (see ... on this label).
P321 - Specific treatment (see ... on this label).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with Local, State, Federa

 $P501 - Dispose \ of \ contents/container \ in \ accordance \ with \ Local, \ State, \ Federal \ and \ Provincial \ regulations.$

 $\underline{\text{Hazards not otherwise classified that have been identified during the classification process:} \\$

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eve: Corrosive. Will cause eye burns, permanent tissue damage, and blindness.

Skin: Contact causes severe skin irritation and possible burns, may cause permanent skin damage. Allergic

May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this

material.

Inhalation: May cause severe respiratory system irritation.

Ingestion:

Chronic Health Effects:

Prolonged skin contact causes burns. Repeated or prolonged inhalation may cause toxic effects.

Signs/Symptoms: Depending on solution concentration, material may be corrosive to skin, mucous membranes and

eyes. Vapors may cause respiratory irritation.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more

susceptible to the effects of this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures:

Chemical Name	CAS#	Ingredient Percent	EC Num.
Aminoethylpiperazine	140-31-8	1 - 10 by weight	
Nonylphenol	25154-52-3	1 - 10 by weight	
Amorphous silicon dioxide	67762-90-7	1 - 10 by weight	
Butadiene acrylonitrile copolymer	68683-29-4	30 - 40 by weight	
4,4'-Methylenebiscyclohexanamine	1761-71-3	20 - 30 by weight	
PACM Oligomers	135108-88-2	1 - 10 by weight	
Triethylene glycol diamine	929-59-9	10 - 20 by weight	

SECTION 4: FIRST AID MEASURES

<u>Description of necessary measures:</u>

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of

the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing

contaminated clothing and shoes. Get medical attention if irritation develops or persists

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give Ingestion:

anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

Suitable and unsuitable extinguishing media:

Suitable Extinguishing Media: Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.

Unsuitable extinguishing media: Water or foam may cause frothing.

Special protective equipment and precautions for fire-fighters:

As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) Protective Equipment:

Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, Fire Fighting Instructions:

contain fire run-off water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

Environmental precautions:

Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

Methods and materials for containment and cleaning up:

Spill Cleanup Measures: Absorb spill with inert material (e,g., dry sand or earth), then place in a chemical waste container.

Provide ventilation. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue.

Corrosive. Avoid personal contact and breathing vapors or mists. Ventilate area. Use proper personal

protective equipment as listed in Section 8.

Reference to other sections:

Other Precautions: Pump or shovel to storage/salvage vessels.

SECTION 7: HANDLING and STORAGE

Precautions for safe handling:

Handling: Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Avoid contact with eyes and skin.

Do not reuse containers without proper cleaning or reconditioning

Hygiene Practices: Wash thoroughly after handling.

Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10)

during welding/flame cutting operations and to protect against dust during sanding/grinding of cured

product.

Conditions for safe storage, including any incompatibilities:

Storage: Store in a cool, dry, well ventilated area away from sources of heat and incompatible materials. Keep

container tightly closed when not in use. Do not store in reactive metal containers. Keep away from acids, oxidizers.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES:

Appropriate engineering controls:

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other

engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye

and face protection regulation, or the European standard EN 166.

 $Chemical-resistant\ gloves\ and\ chemical\ goggles,\ face-shield\ and\ synthetic\ apron\ or\ coveralls\ should\ be\ used\ to\ prevent\ contact\ with\ eyes,\ skin\ or\ clothing.$ Skin Protection Description:

A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be Respiratory Protection:

permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Other Protective: Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower

safety station.

Notes: Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES:

Physical State Appearance: Viscous. Liquid.

Color: Amber.

Ammonia like fishy. **Boiling Point:** Not determined. Melting Point: Not determined

Specific Gravity: 0.99 Solubility: >15%

Vapor Density: Not determined. Vapor Pressure: Not determined.

Percent Volatile: n

Evaporation Rate: Not determined.

pH: alkaline Molecular Formula: Mixture Molecular Weight: Mixture

Flash Point: >200°F (93.3°C)

Pensky-Martens Closed Cup Flash Point Method:

Lower Flammable/Explosive Limit: Not determined. Upper Flammable/Explosive Limit: Not determined. Auto Ignition Temperature: Not determined.

VOC Content: 0 g/L

9.2. Other information:

Percent Solids by Weight 100

SECTION 10: STABILITY and REACTIVITY

Chemical Stability:

Chemical Stability: Stable under normal temperatures and pressures.

Possibility of hazardous reactions:

Hazardous Polymerization: Not reported.

Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions.

Product may slowly corrode copper, aluminum, zinc and galvanized surfaces.

Incompatible Materials:

Incompatible Materials: Oxidizers, acids, and chlorinated organic compounds. Reactive metals (e.g. sodium, calcium, zinc).

Sodium/calcium hypochlorite. Nitrous acid/ oxide, nitrites. Peroxides. Materials reactive with hydroxyl compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

<u>Aminoethylpiperazine</u>:

Eve: Administration into the eye - Rabbit Standard Draize test: 20 mg/24H [Moderate] (RTECS)

Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 880 uL/kg [Details of toxic Skin:

effects not reported other than lethal dose value] (RTECS)

Oral - Rat LD50 - Lethal dose, 50 percent kill: 2140 uL/kg [Details of toxic effects not reported other Ingestion:

than lethal dose value] (RTECS)

Nonylphenol:

Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 2140 uL/kg [Details of toxic Skin:

Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: 2140 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 580 mg/kg [Details of toxic effects not reported other

than lethal dose value] (RTECS)

4,4'-Methylenebiscyclohexanamine:

Administration into the eye - Rabbit Standard Draize test: 10 uL/24H [Severe] (RTECS)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product. Environmental Fate: No environmental information found for this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Description of waste:

Waste Disposal:

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name: Refer to Bill of Lading DOT UN Number: Refer to Bill of Lading

IATA Shipping Name: Refer to Bill of Lading IATA UN Number: Refer to Bill of Lading

IMDG UN Number: Refer to Bill of Lading

IMDG Shipping Name: Refer to Bill of Lading

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product:

Aminoethylpiperazine:

TSCA Inventory Status: Listed

Canada DSL: Listed

Nonylphenol:

TSCA Inventory Status: Listed
Canada DSL: Listed

Amorphous silicon dioxide:

TSCA Inventory Status: Listed
Canada DSL: Listed

Butadiene acrylonitrile copolymer:

TSCA Inventory Status: Listed
Canada DSL: Listed
4,4'-Methylenebiscyclohexanamine:

TSCA Inventory Status: Listed
Canada DSL: Listed

PACM Oligomers:

TSCA Inventory Status: Listed
Canada DSL: Listed

Triethylene glycol diamine:

TSCA Inventory Status: Listed

Canadian Regulations. WHMIS Hazard Class(es): E; D2B

WHMIS Pictograms:





SECTION 16: ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard: 3*
HMIS Fire Hazard: 1
HMIS Reactivity: 0
HMIS Personal Protection: X

Health Hazard	3*
Fire Hazard	1
Reactivity	0
Personal Protection	x

Chronic Health Effects

SDS Revision Date: May 19, 2015
SDS Revision Notes: GHS Update

SDS Format: In accordance to OSHA GHS 1910.1200

SDS Author: Actio Corporation

Disclaimer:

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. ITW Polymers Adhesives, NA, MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the ITW Polymers Adhesives, NA product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a ITW Polymers Adhesives, NA product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the ITW Polymers Adhesives, NA product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. ITW Polymers Adhesives, NA provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, ITW Polymers Adhesives, NA makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from ITW Polymers Adhesives, NA

Copyright© 1996-2015 Actio Corporation. All Rights Reserved.