

Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 02.09.2015

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Nova Five Part A

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Nova Five Part A

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: Nova Five Part A

Recommended uses of the product and restrictions on use: Epoxy binder for patching

Manufacturer Details:

ATCO International
1401 BARCLAY CIRCLE,SE
MARIETTA, GA 30060 United States.
770-424-7550

Emergency telephone number:

1-800-255-3924

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Irritant

Skin irritation, category 2
Eye irritation, category 2A
Skin sensitization, category 1

Skin Irrit. 2
Eye. Irrit. 2A
Skin. Sens. 1

Signal word :Warning

Hazard statements:

Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
Toxic to aquatic life with long lasting effects
Very toxic to aquatic life

Precautionary statements:

If medical advice is needed, have product container or label at hand
Keep out of reach of children
Read label before use
Wash skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Do not eat, drink or smoke when using this product
IF ON SKIN: Wash with soap and water
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.
Continue rinsing
If eye irritation persists get medical advice/attention
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
If skin irritation or a rash occurs: Get medical advice/attention
Store in a dry place
Dispose of contents and container to an approved waste disposal plant

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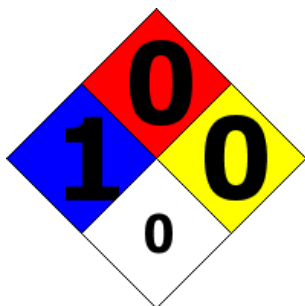
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Other Non-GHS Classification:

WHMIS
NFPA/HMIS



NFPA SCALE (0-4)

Health	1
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 25068-38-6	Epoxy Resin	100 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear. Move exposed to fresh air.

After skin contact: Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact: Seek medical attention. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Seek medical attention if irritation persists or concerned. Protect unexposed eye.

After swallowing: Rinse mouth with water. Do not induce vomiting. Seek medical attention if irritation, discomfort, or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Irritation.;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment: Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions): Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid

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contact with skin, eyes, and clothing. Avoid dust formation.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational. Wear protective equipment.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Always obey local regulations. Wear protective eyewear, gloves, and clothing. Refer to Section 8.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Do not eat, drink, smoke, or use personal products when handling chemical substances. Minimize dust generation and accumulation.

Conditions for safe storage, including any incompatibilities:

Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store in cool, dry conditions in well sealed containers.

SECTION 8 : Exposure controls/personal protection



Control Parameters:

No applicable occupational exposure limits

Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection:

When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Wear protective clothing. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves.

Eye protection:

Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing. Before re-wearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):		Explosion limit lower: Explosion limit upper:	
Odor:		Vapor pressure:	
Odor threshold:		Vapor density:	

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pH-value:		Relative density:	
Melting/Freezing point:		Solubilities:	
Boiling point/Boiling range:		Partition coefficient (n-octanol/water):	
Flash point (closed cup):		Auto/Self-ignition temperature:	
Evaporation rate:		Decomposition temperature:	
Flammability (solid,gaseous):		Viscosity:	a. Kinematic: b. Dynamic:
Density:			

SECTION 10 : Stability and reactivity

Reactivity:Nonreactive under normal conditions.

Chemical stability:Stable under normal conditions.

Possible hazardous reactions:None under normal processing.

Conditions to avoid:Incompatible materials.

Incompatible materials:Strong oxidizing agents, acids, Amines, Bases

Hazardous decomposition products:

SECTION 11 : Toxicological information

Acute Toxicity:	No additional information.
Chronic Toxicity:	No additional information.
Corrosion Irritation:	No additional information.
Sensitization:	Repeated exposure to this product may result in skin sensitization.
Single Target Organ (STOT):	Specific target organ toxicity - single exposure (Category 3), Respiratory system,
Numerical Measures:	No additional information.
Carcinogenicity:	No additional information.
Mutagenicity:	Hamster Lungs DNA inhibition. Hamster ovary Sister chromatid exchange
Reproductive Toxicity:	No additional information.

SECTION 12 : Ecological information

Ecotoxicity Persistence and degradability: 25068-38-6: Result: - According to the results of tests of biodegradability this product is not readily biodegradable.

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13 : Disposal considerations

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Waste disposal recommendations:

Dispose of empty containers as unused product. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11).

SECTION 14 : Transport information

UN-Number

N/A - Transported in limited quantities

UN proper shipping name

N/A

Transport hazard class(es)

Packing group: N/A

Environmental hazard:

Transport in bulk:

Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

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Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)

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Last updated : 05.18.2015

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Nova Five Part B

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Nova Five Part B

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: Nova Five Part B

Recommended uses of the product and restrictions on use: Curing Agent for Epoxy Binder for Patching

Manufacturer Details:

ATCO International
1401 BARCLAY CIRCLE,SE
MARIETTA, GA 30060 United States.
770-424-7550

Emergency telephone number:

1-800-255-3924

SECTION 2 : Hazards identification

Classification of the substance or mixture:



Corrosive



Irritant



Health hazard



Environmentally Damaging

Acute toxicity, Oral (Category 4), H302
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Reproductive toxicity (Category 2), H361
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

Signal word : Danger

Hazard statements:

Harmful if swallowed
Causes severe skin burns and eye damage
Causes serious eye damage
Suspected of damaging fertility or the unborn child
Very toxic to aquatic life with long lasting effects

Precautionary statements:

Keep container tightly closed

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Keep away from heat/sparks/open flames/hot surfaces. No smoking

IF ON SKIN: Wash with soap and water

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing

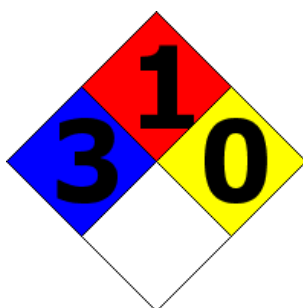
Store in a well ventilated place

Protect from sunlight

Dispose of contents and container as instructed in Section 13

Other Non-GHS Classification:

WHMIS NFPA/HMIS



NFPA SCALE (0-4)

Health	3
Flammability	1
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 84852-15-3	Nonyl Phenol	50-70 %
CAS 140-31-8	Amino Ethyl Piperazine	3-6 %
CAS 9046-10-0	Polyoxypropylene Amine	30-40 %
Percentages are by weight		

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

After skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

After eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

After swallowing: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) ;

Indication of any immediate medical attention and special treatment needed:

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SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Carbon Oxides

Advice for firefighters:

Protective equipment: Wear self-contained breathing apparatus for firefighting if necessary.

Additional information (precautions):

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and material for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage

SECTION 8 : Exposure controls/personal protection



Control Parameters:

No applicable occupational exposure limits

Appropriate Engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)

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Protection of skin:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 480 min Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M) Splash contact Material: Nitrile rubber Minimum layer thickness: 0.2 mm Break through time: 60 min Material tested: Dermatril® P (KCL 743 / Aldrich Z677388, Size M) data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye protection:

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

General hygienic measures:

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):		Explosion limit lower: Explosion limit upper:	
Odor:		Vapor pressure:	
Odor threshold:		Vapor density:	
pH-value:		Relative density:	
Melting/Freezing point:		Solubilities:	
Boiling point/Boiling range:		Partition coefficient (n-octanol/water):	
Flash point (closed cup):		Auto/Self-ignition temperature:	
Evaporation rate:		Decomposition temperature:	
Flammability (solid,gaseous):		Viscosity:	a. Kinematic: b. Dynamic:
Density:			

SECTION 10 : Stability and reactivity

Reactivity:No data available

Chemical stability:Stable under recommended storage conditions.

Possible hazardous reactions:No data available

Conditions to avoid:excessive heat

Incompatible materials:Strong oxidizing agents

Hazardous decomposition products:No data available

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SECTION 11 : Toxicological information

Acute Toxicity:	
Oral:	LD50 Oral - Rat - male and female - 1,412 mg/kg
Chronic Toxicity: No additional information.	
Corrosion Irritation: No additional information.	
Sensitization:	No additional information.
Single Target Organ (STOT):	No additional information.
Numerical Measures:	No additional information.
Carcinogenicity:	No additional information.
Mutagenicity:	No additional information.
Reproductive Toxicity:	No additional information.

SECTION 12 : Ecological information

Ecotoxicity

Toxicity to fish : flow-through test LC50 - Lepomis macrochirus - 0.209 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: semi-static test EC50 - Daphnia magna (Water flea) - 0.0844 mg/l - 48 h

Toxicity to algae : static test EC50 - Selenastrum capricornutum (green algae) - 0.33 mg/l - 72 h

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 14 : Transport information

UN-Number

N/A - Transported in limited quantities

UN proper shipping name

N/A

Transport hazard class(es)

Packing group:N/A

Environmental hazard:

Transport in bulk:

Special precautions for user:

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SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

GHS Full Text Phrases:

Abbreviations and acronyms:

Effective date : 02.08.2015

Last updated : 05.18.2015