USA SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: ADH 1020

Product Use/Class: Primer for Adhesive

Forsch Polymer Corp 3025 S. Wyandot St. Englewood, CO.

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Non-Transportation Emergency: 303 548-7716

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EFFECTIVE DATE: May, 2015

2. HAZARDS IDENTIFICKFION

GHS CLASSIFICATION:

Flammable liquids Category 2

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Germ cell mutagenicity Category 1B

Carcinogenicity Category 2

Reproductive toxicity Category 1A

Specific target organ systemic toxicity (single exposure) Category 3

Specific target organ systemic toxicity (single exposure) Category 1 Cardio-vascular system, Respiratory system,

Kidney, Nervous system, Central nervous system, retina, Systemic toxicity

Specific target organ systemic toxicity (repeated exposure) Category 1 Nervous system, Body, Hematopoietic

System, Cardio-vascular system, Central nervous system, Digestive organs, Kidney, Liver, spleen, thymus, retina,

Eyes

Hazardous to the aquatic environment - acute hazard Category 1

Hazardous to the aquatic environment - chronic hazard Category 1

GHS LABEL ELEMENTS:

Symbol(s)









Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

Suspected of causing cancer.

May damage fertility or the unborn child.

May cause drowsiness or dizziness.

May cause respiratory irritation.

Causes damage to organs.(Cardio-vascular system, Respiratory system, Kidney, Nervous system, Central nervous system, retina, Systemic toxicity)

Causes damage to organs through prolonged or repeated exposure. (Nervous system, Body, Hematopoietic System, Cardio-vascular system, Central nervous system, Digestive organs, Kidney, Liver, spleen, thymus, retina, Eyes) Very toxic to aquatic life.

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Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

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

Ground/Bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Useonly non-sparking tools.

Take precautionary measures against static discharge.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Use personal protective equipment as required.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

Response

In case of fire: refer to section 5 of SDS for extinguishing media.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see supplemental first aid instructions on this label).

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

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/attention.

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

Continue rinsing.

Collect spillage.

Storage

Store in a well-ventilated place. Keep cool.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma. Harmful if absorbed through skin. May cause skin and eye burns. Contains methanol; may be harmful or fatal if swallowed; ingestion of methanol may cause blindness or permanent eye damage. Cannot be made non-poisonous. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: May cause long-term lung damage. May affect the gastrointestinal system. Prolonged or repeated contact may result in dermatitis. IARC has designated Methyl isobutyl ketone to be in Group 2B - possibly carcinogenic to humans. ACGIH considers Ethyl alcohol to be an A3 carcinogen (confirmed animal carcinogen with unknown relevance in humans).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
Ethyl alcohol	64-17-5	60 - 65 %
Methanol	67-56-1	1 - 5 %

Phenol	108-95-2	1 - 5	%
Methyl isobutyl ketone	108-10-1	1 - 5	%

Any "PROPRIETARY" component(s) in the above table is considered trade secret, thus the specific chemical and its exact concentration is being withheld.

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, WaterFog

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the SDS form. Contain and remove with inert absorbent material and non-sparking tools.

7. HANDLING AND STORAGE

HANDLING: Cannot be made non-poisonous. Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Empty containers should not be reused. Use with adequate ventilation. Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored.

STORAGE: Do not store or use near heat, sparks, or open flame.Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements.Store only in well-ventilated areas.Do not puncture, drag, or slide container.Keep container closed when not in use.

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INCOMPATIBILITY: Strong acids, bases, and strong oxidizers. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-	ACGIH TLV-	OSHA PEL-	OSHA PEL-	Skin
	TWA	STEL	TWA	CEILING	
Ethyl alcohol	N.E.	1,000 ppm	1,900 mg/m3 1,000 ppm	N.E.	N.A.
Methanol	200 ppm	250 ppm	260 mg/m3 200 ppm	N.E.	S
Phenol	⁵ ppm	N.E.	19 mg/m3 5 ppm	N.E.	S
Methyl isobutyl ketone	50 ppm	75 ppm	410 mg/m3 100 ppm	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volumeshould be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) shouldbe provided to prevent flammable vapor/air mixtures from accumulating.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions whereexposure limits may be greatly exceeded, use an approved air-supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Usesafety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

VAPOR PRESSURE: N.D. ODOR: Solvent APPEARANCE: Amber VAPOR DENSITY: LOWER Heavier than Air EXPLOSIVE LIMIT: 1.4 %(V) PHYSICAL STATE: Liquid 58 °F, 14 °C Setaflash 36.5 %(V) FLASH POINT: UPPER EXPLOSIVE LIMIT: Closed Cup BOILING RANGE: **EVAPORATION RATE:** Slower than n-butyl-65 - 117 °C acetate 0.87 g/cm3 - 7.25 lb/gal **AUTOIGNITION TEMPERATURE:** ND DENSITY: VISCOSITY, DYNAMIC: >50 mPa.s @ 25 °C N D >57 mm2/s @ 25 °C ODOR THRESHOLD: N.D. VISCOSITY, KINEMATIC:

DECOMPOSITION TEMPERATURE: **SOLUBILITY IN H2O:** Insoluble **VOLATILE BY WEIGHT:** 74.59%

N.A. **VOLATILE BY VOLUME:** 83.48 % FREEZE POINT .44 lb/gal. 653 g/I N D VOC CALCULATED:

COEFFICIENT OF WATER/OIL N.D. DISTRIBUTION:

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures. Sources of ignition.; High humidity.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.; Alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, Butyraldehyde, butyric acid, acrolein, crotonaldehyde.

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	LD50/LC5O
Ethyl alcohol	Oral LD50: Rat 7,060 mg/kg
	Inhalation LC50: Rat 124.7 mg/1 /4 h
Methanol	Oral LD50: Rat 6,200 mg/kg
	Dermal LD50: Rabbit 15,800 mg/kg
	Inhalation LC50: Rat 22500 ppm/8 h
Phenol	Oral LD50: Rat 317 mg/kg
	Oral LD50: Rat 340 mg/kg
	Dermal LD50: Rabbit 630 mg/kg
	GHS LC50 (dust and mist): Acute toxicity point estimate 0.5 mg/1 /
Methyl isobutyl ketone	Oral LD50: Rat 2,080 mg/kg
	Dermal LD50: Rabbit 3,000 mg/kg
	Inhalation LC50: Rat 8.2 mg/1 /4 h

Germ cell mutagenicity: Category 1B - May cause genetic defects.

Components contributing to classification: Ethyl alcohol. Phenol. VM&P naphtha.

Carcinogenicity: Category 2 - Suspected of causing cancer.

Components contributing to classification: Ethyl alcohol. Methyl isobutyl ketone. VM&P naphtha.

Reproductive toxicity: Category 1A - May damage fertility or the unborn child. Components contributing to classification: Ethyl alcohol. Methanol. Phenol.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Ethyl alcohol	Fish: Pimephales promelas > 100 mg/196 h Static
. ,	Pimephales promelas 13,400 - 15,100 mg/196 h flow-through
	Invertebrates: Daphnia magna 9,268 - 14,221 mg/148 h
	Daphnia magna 2 mg/148 h Static
	F' 1 P' 1 - 1 1 - 20 200 /1001 G 1
Methanol	Fish:Pimephales promelas 28,200 mg/196 h flow-through
	Pimephales promelas > 100 mg/196 h Static
	Oncorhynchus mykiss 19,500 - 20,700 mg/196 h flow-through
	Lepomis macrochirus 13,500 - 17,600 mg/196 h flow-through
Phenol	Fish: Pimephales promelas 11.9 - 50.5 mg/I96 h flow-through
	Pimephales promelas 20.5 - 25.6 mg/196 h Static
	Pimephales promelas 32 mg/I96 h
	Oncorhynchus mykiss 5.449 - 6.789 mg/196 h flow-through

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Oncorhynchus mykiss 7.5 - 14 mg/196 h Static Oncorhynchus mykiss 4.23 - 7.49 mg/196 h semi-static Oncorhynchus mykiss 5.0 - 12.0 mg/196 h Lepomismacrochirus 13.5 mg/196 h Static Lepomis macrochirus 11.9 - 25.3 mg/196 h flow-through Lepomis macrochirus 11.5 mg/196 h semi-static Poecilia reticulata 34,09 - 47.64 mg/196 h Static Poecilia reticulata 31 mg/196 h semi-static Brachydanio rerio 27.8 mg/196 h Cyprinus carpio 0.00175 mg/196 h semi-static Oryzias latipes 33.9 - 43.3 mg/196 h flow-through Oryzias latipes 23.4 - 36.6 mg/196 h Static Invertebrates: Daphnia magna 4.24 - 10.7 mg/148 h Static Daphnia magna 10.2 - 15.5 mg/148 h Plants: Pseudokirchneriella subcapitata 46.42 mg/196 h Pseudokirchneriella subcapitata 0.0188 - 0.1044 mg/196 h Static Desmodesmus subspicatus 187 - 279 mg/172 h Static Methyl isobutyl ketone Fish: Pimephales promelas 496 - 514 mg/196 h flow-through Invertebrates: Daphnia magna 170 mg/148 h Plants: Pseudokirchneriella subcapitata 400 mg/196 h

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality. Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. TRANSPORT INFORMATION

US DOT Road

DOT Proper Shipping Name: Adhesives

DOT Hazard Class: 3
SECONDARY HAZARD: None
DOTUN/NA Number: 1133
Packing Group: II
Emergency Response Guide Number: 128

IATA Cargo

PROPER SHIPPING NAME: Adhesives

DOT Hazard Class: 3
HAZARD CLASS: None
UN-NUMBER: 1133
PACKING GROUP: II
EMS: 3L

1MDG

PROPER SHIPPING NAME: Adhesives

DOT Hazard Class: 3
HAZARD CLASS: None
UN-NUMBER: 1133
PACKING GROUP: II
EMS: F-E

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The listed transportation classification applies to US DOT Road, IATA Cargo, and IMDG non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

SARA SECTION 313

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

Chemical Name	CAS Number	Weight % Less Than
Methanol	67-56-1	5.0 %
Phenol	108-95-2	5.0 %
Methyl isobutyl ketone	108-10-1	5.0 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION

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

NONE

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 3 PHYSICAL HAZARD: 0* -

Indicates a chronic hazard; see Section 2

Revision: New GHS SDS Format

Effective Date: May, 2015

DISCLAIMER

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