# SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Accelerator 380 PRODUCT CODES: Accelerator 380

MANUFACTURER: National Polymers Inc. STREET ADDRESS: 9 Guttman Avenue CITY, STATE, ZIP: Charleroi, Pa. 15022

INFORMATION PHONE: 724-483-9300 EMERGENCY PHONE: Chemtrec 800-424-9300 FAX PHONE: 724-483-9306

PREPARED BY: Gary Zippay

DATE REVISED: 12/9/20

Chemical Name or Class: Epoxy-amine Accelerator

**SECTION 2: HAZARDS IDENTIFICATION** 

**Hazard Overview** 

# GHS Classification: (H225 Flammable liquids category 2), (H302 Acute toxicity, oral Category 4), (H318 Serious eye damage/eye irritation category 1)

GHS Label Elements and Precautionary Statements: Label Elements: Flame, Exclamation Mark, Corrosion



Hazard Statements: Danger: Highly flammable liquid and vapor Warning: Harmful if swallowed Danger: Causes serious eye damage Precautionary statements:

P102 Keep out of reach of children.

# P103 Read label before use

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

### **Response:**

P301 + P312 IF SWALLOWED: Call POISON CENTER/doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

### Storage:

P403 + P235 Store in a well-ventilated place. Keep cool

Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws.

### HMIS HAZARD CLASSIFICATION HEALTH: 3 FLAMMABILITY

FLAMMABILITY: 3 REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: D

# POTENTIAL HEALTH EFFECTS

EYES: CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, OR BLURRED VISION. SKIN: MAY CAUSE IRRITATION, DEFATTING AND DERMATITIS. INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA AND ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PHEUMONTITIS WHICH CAN BE FATAL. INGESTION CAN BE HARMFUL OR TOXIC. INHALATION:

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, HEADACHE AND POSSIBLE UNCONSCIOUSNESS

HEALTH HAZARDS (ACUTE AND CHRONIC):

PRODUCT CAN CAUSE SENSITIZATION BY EXPOSURE THROUGH CONTACT OR HIGH CONCENTRATIONS OF VAPOR. OVER EXPOSURE TO THIS MATERIAL CAN CAUSE CARDIAC ABNORMALITIES, ANEMIA, LIVER ABNORMALITIES, KIDNEY DAMAGE OR EVEN EYE DAMAGE MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: RESPIRATORY CONDITIONS OR OTHER ALLERGIC RESPONSE. CARCINOGENICITY OSHA: NO NTP: NO IARC: YES

ADDITIONAL CARCINOGENICITY INFORMATION:

ETHANOL IS LISTED AS A GROUP 1 CARCINOGENIC TO HUMANS BY IARC

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

INGREDIENT CAS NO.	OSHA PEL	ACGIH TLV	OSHA STEL	WEIGHT %
ETHANOL 64-17-5	NONE	1000 ppm	NONE	30-50
NITRIC ACID, AMMONIUM CALCIUM SALT 15245-12-2	NONE	NONE	NONE	30-50

SECTION 3 NOTES:

(\*) INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III AND OF 40 CFR 372. Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4: FIRST AID MEASURES	

# GENERAL ADVICE:

MOVE OUT OF DANGEROUS AREA. CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE. TREAT SYMPTOMATICALLY. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.

EYES:

SMALL AMOUNTS SPLASHED INTO EYES CAN CAUSE IRREVERSIBLE TISSUE DAMAGE AND BLINDNESS. IN THE CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. CONTINUE RINSING EYES DURING DRANSPORT TO HOSPITAL. REMOVE CONTACT LENSES. KEEP EYE WIDE OPEN WHILE RINSING. IF EYE IRRITATION PERSISTS, CONSULT A SPECIALIST.

SKIN:

SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:

KEEP RESPIRATORY TRACT CLEAR. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF SYMPTOMS PERSIST, CALL A PHYSICIAN. TAKE VICTIM IMMEDIATELY TO HOSPITAL.

INHALATION:

REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS OCCUR.

# **SECTION 5: FIRE-FIGHTING MEASURES**

FLAMMABLE LIMITS IN AIR, UPPER: N/A (% by volume) LOWER: N/A FLASH POINT: 66F METHOD USED: SETA FLASH SUITABLE EXTINGUISHING MEDIA: ALCOHOL-RESISTANT FOAM, CO2, DRY CHEMICAL **UNSUITABLE EXTINGUISHING MEDIA: HIGH VOLUME WATER JET** SPECIFIC HAZARDS DURING FIREFIGHTING: DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS OR WATER COURSES. HAZARDOUS COMBUSTION PRODUCTS: CARBON OXIDES FURTHER INFORMATION: COLLECT CONTAMINATED FIRE EXTINGUISHING WATER SEPARATELY. THIS MUST NOT BE DISCHARGED INTO DRAINS. FIRE RESIDUES AND CONTAMINATED FIRE EXTINGUISHING WATER MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS. FOR SAFETY REASONS IN CASE OF FIRE, CANS SHOULD BE STORED SEPARATELY IN CLOSED CONTAINMENTS. USE A WATER SPRAY TO COLL

FULLY CLOSED CONTAINERS.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:

WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.

# SECTION 6: RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

USE PERSONAL PROTECTIVE EQUIPMENT. ENSURE ADEQUATE VENTILATION. REMOVE ALL SOURCES OF IGNITION. EVACUATE PERSONNEL TO SAFE AREAS. REFER TO PROTECTIVE MEASURES LISTED IN SECTIONS 7 AND 8. BEWARE OF VAPORS ACCUMULATING TO FORM EXPLOSIVE CONCENTRATIONS. VAPORS CAN ACCUMULATE IN LOW AREAS.

ENVIRONMENTAL PRECAUTIONS:

PREVENT PRODUCT FROM ENTERING DRAINS. PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. IF THE PRODUCT CONTAMINATED RIVERS AND LAKES OR DRAINS INFORM RESPECTIVE AUTHORITIES.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

CONTAIN SPILLAGE, AND THEN COLLECT WITH NON-COMBUSTIBLE ABSORBENT MATERIAL, (SAND, EARTH, DIATOMACEOUS EARTH, VERMICULITE) AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL/NATIONAL REGULATIONS (SEE SECTION 13)

SECTION 7: HANDLING AND STORAGE

ADVICE ON PROTECTION AGAINST FIRE AND EXPLOSION:

DO NOT SPRAY ON A NAKED FLAME OR ANY INCANDESCENT MATERIAL. TAKE NECESSARY ACTION TO AVOID STATIC ELECTRICITY DISCHARGE (WHICH MIGHT CAUSE IGNITION OF ORGANIC VAPORS). USE ONLY EXPLOSION-PROOF EQUIPMENT. KEEP AWAY FROM OPEN FLAMES, HOT SURFACES AND SOURCES OF IGNITION.

### **ADVICE ON SAFE HANDLING:**

DO NOT BREATHE VAPORS/DUST. AVOID CONTACT WITH SKIN AND EYES. FOR PERSONAL PROTECTION SEE SECTION 8. SMOKING, EATING AND DRINKING SHOULD BE PROHIBITED IN THE APPLICATION AREA. TAKE PRECAUTIONARY MEASURES AGAINST STATIC DISCHARGES. CONTAINER MAY BE OPENED ONLY UNDER EXHAUST VENTILATION HOOD. OPEN CONTAINERS CAREFULLY AS CONTENTS MAY BE UNDER PRESSURE.

CONDITIONS FOR SAFE STORAGE:

NO SMOKING. 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. OBSERVE LABEL PRECAUTIONS. KEEP IN PROPERLY LABELED CONTAINERS. STORE AT TEMPERATURES BETWEEN (43-82F/6-28C). MATERIALS TO AVOID:

STRONG ACIDS, STRONG BASES, STRONG OXIDIZING AGENTS.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**RESPIRATORY PROTECTION:** 

NO PERSONAL RESPIRATORY PROTECTIVE EQUIPMENT NORMALLY REQUIRED. VENTILATION: PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST) VENTILATION. PROTECTIVE GLOVES: IMPERVIOUS GLOVES - NITRILE OR BUTYL-RUBBER SOLVENT RESISTANT GLOVES EYE PROTECTION: TIGHTLY FITTING SAFETY GOGGLES (KEEP EYE WASH BOTTLE WITH PURE WATER AT HAND). OTHER PROTECTIVE CLOTHING OR EQUIPMENT: CHOOSE BODY PROTECTION ACCORDING TO THE AMOUNT AND CONCENTRATION OF THE DANGEROUS SUBSTANCE AT THE WORK PLACE. RECOMMENDATION - IMPERVIOUS CLOTHING. WORK HYGIENIC PRACTICES: DO NOT EAT, DRINK OR SMOKE WHILE USING PRODUCT. WASH HANDS BEFORE BREAKS AND AT THE END OF THE DAY. SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: LOW VISCOSITY LIQUID WITH ALCOHOL-LIKE ODOR BOILING POINT OR RANGE: 151F VAPOR DENSITY (AIR = 1): N/A SPECIFIC GRAVITY (H2O = 1): 1.17 EVAPORATION RATE: N/A SOLUBILITY IN WATER: PARTIALLY SOLUBLE

Odor Threshhold: N/A pH: 5.6 Melting point/freezing point: N/A Vapor Pressure: 59hPa Auto Ignition Temperature: N/A Partition Coefficient: n-octanol/water: N/A Decomposition Temperature: >392F

# SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY:** 

NO DANGEROUS REACTION KNOWN UNDER CONDITIONS OF NORMAL USE. CHEMICAL STABILITY: STABLE UNDER NORMAL CONDITIONS. POSSIBILITY OF HAZARDOUS REACTIONS: VAPORS MAY FORM EXPLOSIVE MIXTURE WITH AIR. CONDITIONS TO AVOID: HEAT, FLAMES AND SPARKS. **INCOMPATIBLE MATERIALS:** NONE KNOWN HAZARDOUS DECOMPOSITION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE

# SECTION 11: TOXICOLOGICAL INFORMATION

### Acute oral toxicity:

Product - Acute toxicity estimate: 1,041 mg/kg (calculation method)

# Acute inhalation toxicity:

Component (ethanol) - LC50 (rat, male and female): 116.9 mg/l, 4h, test atmosphere: vapor (OECD 403)

Acute dermal toxicity:

Component (nitric acid, ammonium calcium salt) - LD50 (rat, male and female) : >2,000 mg/kg (OECD 402), assessment: no acute dermal toxicity Component (ethanol) – LD50 (rabbit) : >2,000 mg/kg (OECD 402)

### Skin corrosion/irritation:

Product - may cause skin irritation in susceptible persons

# Serious eye damage/eye irritation:

Component (nitric acid, ammonium calcium salt) - rabbit; result: irreversible effects on the eye (OECD 405) Component (ethanol) - rabbit: result: mild eye irritant (OECD 405)

Respiratory or skin sensitization:

Product - skin, guinea pig; result: does not cause skin sensitization.

### Germ cell mutagenicity:

Component (ethanol) - genotoxicity in vitro: in vitro mammalian cell gene mutation test, mouse lymphoma cells, 33.99mg/ml, with and without metabolic activation (OECD 476), result: negative. Reverse mutation assay, salmonella typhimurium, 10 mg/plate, with and without metabolic activation (OECD 471), result: negative.

# Carcinogenicity:

Component (ethanol) - rat, NOAEL: > 3,000 mg/kg body weight (OECD 451). IARC: Group 1 Carcinogenic to humans. ACGIH: confirmed animal carcinogen with unknown relevance to humans.

# **Reproductive toxicity:**

Component (nitric acid, ammonium calcium salt) - Effects on fertility; rat, male and female, oral (OECD 422), Effects on fetal development; rat, female, oral; general toxicity maternal: no observed adverse effect level: 1,500 mg/kg body weight (OECD 422), result: no teratogenic effects. Component (ethanol) - Effects on fertility: rat, general toxicity - parent: no observed adverse effect level: 5,200 mg/kg body weight. Effects on fetal development: mouse, male or female, oral; result: Teratogenic effects.

# STOT - single exposure: no data

STOT - repeated exposure: no data

# Repeated dose toxicity:

Component (nitric acid, ammonium calcium salt) - rat, male and female, NOAEL: > 1000 mg/kg/d, ingestion, 672h, 7d, subacute toxicity. Component (ethanol) - rat, male, NOAEL: > 1.28 g/kg, ingestion, 14 weeks, 7d, sub chronic toxicity. Aspiration toxicity: no data

# **SECTION 12: ECOLOGICAL INFORMATION**

### Toxicity to fish:

Component (nitric acid, ammonium calcium salt) - LC50 (oncorhynchus mykiss / rainbow trout) : > 98.6 mg/l, 96h, static test (OECD 203). Component (ethanol) - LC50 (oncorhynchus mykiss / rainbow trout): 13,000 mg/l, 96h (OECD 203).

## Toxicity to daphnia and other aquatic invertebrates:

Component (nitric acid, ammonium calcium salt) - EC50 (daphnia magna / water flea): 490 mg/l, 48h, fresh water

Component (ethanol) - LC50 (daphnia magna / water flea): 12,340 mg/l, 48h

### Toxicity to algae/aguatic plants:

Component (ethanol) - EC50 (chlorella vulgaris / fresh water algae): 275 mg/l, 72h, static test, fresh water (OECD 201). NOEC (lemna gibba / gibbous duckweed): 280 mg/l (OECD 201).

# Chronic toxicity to daphnia and other aquatic invertebrates:

Component (ethanol) - NOEC (daphnia magna / water flea): 9.6 mg/l, 10d, semi-static test, fresh water. NOEC (ceriodaphnia dubia / water flea): 9.6 mg/l, 7d, semi-static test, fresh water.

# Toxicity to microorganisms:

Component (nitric acid, ammonium calcium salt) - EC50 (activated sludge): > 1,000 mg/l, 3h (OECD 209)

Component (ethanol) - (activated sludge): 440 mg/l

# Acute aquatic toxicity:

Component (nitric acid, ammonium calcium salt) - Has no known Eco-toxicological effects.

Chronic aquatic toxicity: Component (nitric acid, ammonium calcium salt) – Has no known Eco-toxicological effects. Biodegradability: Component (ethanol) – 97% (OECD 301B) Biochemical Oxygen Demand (BOD): Component (ethanol) – 1.67 g/g, 5d Chemical Oxygen Demand (COD): Component (ethanol) – 1990 mgO2/g Bioaccumulation: Component (ethanol) – Bioconcentration factor (BCF): 0.66 – 3.2 Partition coefficient: n-octanol/water: Component (ethanol) – low Pog: -0.31 Hazardous to the ozone layer: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpart A, App.A + B)

# SECTION 13: WASTE DISPOSAL

# WASTE DISPOSAL METHOD: DISPOSE OF MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL LAWS.

**SECTION 14: Transport Information** 

DOT: UN1170, Flammable Liquids (Ethanol), 3, PGII IMO/IMDG: UN1170, FLAMMABLE LIQUIDS (ETHANOL), 3, PG II

# **SECTION 15: REGULATORY INFORMATION**

### CERCLA Reportable Quantity:

Butanone CAS# 78-93-3 – RQ=5000# (Calculated product RQ exceeds reasonably attainable upper limit) SARA 311/312 Hazards: Flammable, acute toxicity (any route of exposure), serious eye damage or eye irritation SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. TSCA, DSL, CH INV, AICS, NZIOC, ENCS, KEIC, PICCS, IECSC, TCSI listed

# **SECTION 16: OTHER INFORMATION**

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate. However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available See Section 1 for date of preparation