

# SAFETY DATA SHEET

FORGE

SDS DATE: 12/5/2016

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** FORGE

**DISTRIBUTOR:** CHS Inc  
**ADDRESS:** 5500 Cenex Drive • Inver Grove Heights, MN 55077  
**PHONE:** [651-355-6000](tel:651-355-6000)

**EMERGENCY CHEMTREC PHONE:** US: 1-800-424-9300

**CHEMICAL NAME:** Proprietary mixture  
**CHEMICAL FAMILY:** Acidifying surfactant  
**CHEMICAL FORMULA:** Mixture

**PRODUCT USE:** Surfactant adjuvant

**SECTION 1 NOTES:** None

## SECTION 2: HAZARDS IDENTIFIED

### GHS Ratings:

#### Toxicity Categories

Eye corrosion / irritation Category 1  
Flammable liquid Category 4



**Signal Word: DANGER**

#### GHS HAZARDS

H227 Combustible liquid.  
H318 Causes serious eye damage.

#### GHS PRECAUTIONS

P102 Keep out of reach of children.  
P103 Read label before use.  
P210 Keep away from heat, sparks, open flames or hot surfaces – No smoking.  
P233 Keep container tightly closed.  
P234 Keep only in original container.  
P261 Avoid breathing dust, fume, gas, mist, vapors or spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves, protective clothing, eye protection and face protection.  
P301+312 IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell.  
P302+352 IF ON SKIN: Wash with plenty of soap and water.  
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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 then continue rinsing cautiously.  
P310 Immediately call a POISON CENTER, doctor or physician.  
P307+378 In case of fire: Use Foam, Dry Chemical, CO2, Water Spray to extinguish.  
P403+235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents in container to an approved waste disposal facility in accordance with all local, regional, national and international regulations.

## SECTION 3: INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>% WT</u>
Propionic Acid	79-09-4	30 – 50%
Lecithin	8002-43-5	10 - 20%
Fatty Acid	61790-12-3	5 - 10%
Proprietary	Proprietary	1 - 5%
Proprietary	Proprietary	30 - 40%

**NOTE:** Product does NOT contain any pesticides or pest control agents.

**SECTION 3 NOTES:** These specific chemical identities and or exact percentage (concentration) of composition have been withheld as a trade secret.

**CARCINOGENICITY** OSHA: No ACGIH: No NTP: No IARC: No OTHER: No

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## SECTION 4: FIRST AID MEASURES

Have the product container with you when calling a poison control center or doctor, or going for treatment.

**IF IN EYES:** Immediately call a poison center, doctor or physician. Rinse cautiously with water for several minutes. Remove contact lenses if present, after the first 5 minutes, then continue cautiously rinsing eye.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing and wash it before reuse. Wash skin with plenty of soap and water for several minutes.

**IF SWALLOWED:** Unless advised otherwise by a poison control center or doctor, have person rinse mouth with water, if able. Do not give anything by mouth to an unconscious person.

**IF INHALED:** Remove person to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth to mouth if possible. Call a poison center, doctor or physician if you feel unwell.

### NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES: None

## SECTION 5: FIRE FIGHTING MEASURES

### NFPA HAZARD CLASSIFICATION

HEALTH: 3      FLAMMABILITY: 2      REACTIVITY: 0      OTHER: -

**IN CASE OF FIRE:** In case of fire: Use Foam, Dry Chemical, CO2, Water Spray to extinguish. Keep away from heat, sparks, open flames or hot surfaces- NO SMOKING.

**SPECIAL FIRE FIGHTING PROCEDURES:** Use alcohol-type or universal-type foams on larger fires. Smaller fires should be extinguished with carbon dioxide or dry chemical. Do not use water or foam directly on the fire. Use self-contained breathing apparatus with fighting any fire in an enclosed area.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** May be ignited by heat, sparks or flames. Vapors may travel to a source of ignition and flash back. Containers may explode in heat of fire.

**HAZARDOUS DECOMPOSITION PRODUCTS:** During combustion, oxides of carbon.

SECTION 5 NOTES: None

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Surround and absorb all spills to prevent material damage. Material should be collected and disposed in proper manner. Dike the area to prevent spill from spreading. Spilled material should be absorbed onto an inert material and scooped up. Soak up spill with a suitable absorbent. Sweep up absorbed material and place in a chemical waste container for disposal. Wear suitable protective equipment.

SECTION 6 NOTES: None

## SECTION 7: HANDLING AND STORAGE

**HANDLING** Keep out of reach of children. Read label before use. Keep away from heat, sparks, open flames or hot surfaces – No smoking. Keep container tightly closed. Keep only in original container. Avoid breathing dust, fume, gas, mist, vapors or spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection and face protection.

**STORAGE:** Store in a cool well-ventilated place. Keep in original container tightly closed. Do not reuse empty container. Do not store with food, feed, or other material to be used or consumed by humans or animals. Do not contaminate water supplies. For optimal storage, store between 40° and 90° F.

SECTION 7 NOTES: None



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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

	OSHA		ACGIH		NIOSH	
	PEL	STEL	PEL	STEL	PEL	STEL
Propionic Acid 79-09-4	10 ppm /8hr 30 mg/m <sup>3</sup>	15 ppm / 15min				

- VENTILATION:** Normal room ventilation (mechanical) or outdoor use should be satisfactory.
- RESPIRATORY PROTECTION:** Wear a NIOSH/OSHA approved respirator, approved for use with propionic acid, if necessary.
- EYE PROTECTION:** Chemical goggles. 
- SKIN PROTECTION:** Chemical gloves, long-sleeved shirts and pants. 
- OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Eye wash and safety shower should be easily accessible.
- WORK HYGIENIC PRACTICES:** Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse.
- EXPOSURE GUIDELINES:** If exposed, see section 4 for acute exposure first aid.
- SECTION 8 NOTES:** None

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE:** Amber to dark brown
- ODOR:** Strong, vinegar-like
- ORDER THRESHOLD:** Not known
- PHYSICAL STATE:** Liquid
- pH AS SUPPLIED:** Not applicable
- pH (Other):** Acidic
- INITIAL BOILING POINT:** F: Unknown  
C: Unknown
- BOILING POINT RANGE:** F: Unknown  
C: Unknown
- MELTING POINT:** F: Unknown  
C: Unknown
- FREEZING POINT:** F: Unknown  
C: Unknown
- FLASH POINT:** F: 147  
C: 64
- METHOD USED:** PMCC
- FLAMMABILITY (solid, gas):** Combustible
- FLAMMABLE LIMITS IN AIR, UPPER (% BY VOLUME):** Unknown
- FLAMMABLE LIMITS IN AIR, LOWER (% BY VOLUME):** Unknown
- VAPOR PRESSURE (mmHg):** @ Unknown  
F: Unknown  
C: Unknown
- VAPOR DENSITY (AIR = 1):** @ Unknown  
F: Unknown  
C: Unknown
- RELATIVE DENSITY:** 0.989 to 1.027
- EVAPORATION RATE:** Unknown
- BASIS (butyl acetate=1):**
- SOLUBILITY IN WATER:** Dispersible
- PARTITION COEFFICIENT: (n-octanol/water):** Unknown
- AUTO-IGNITION TEMPERATURE:** Unknown
- DECOMPOSITION TEMPERATURE:** Unknown
- VISCOSITY:** @ Unknown  
F: Unknown  
C: Unknown
- CORROSIVITY:** Not corrosive to metal by ASTM G31-72

### SECTION 9 NOTES: Values are not product specifications.

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

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## SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable  Unstable

CONDITIONS TO AVOID (STABILITY): None known

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents. Can react with metals, strong bases and amines.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: During combustion, oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID (POLYMERIZATION): None known

SECTION 10 NOTES: None

## SECTION 11: TOXICOLOGICAL INFORMATION

### TOXICOLOGICAL INFORMATION:

#### MIXTURE TOXICITY

Dermal Toxicity: >5050mg/kg  
Oral Toxicity: >5000mg/kg  
Acute eye Irritation (Rabbit) score of 65.0 out of 110 effect persisted through 21 day  
Acute Dermal irritation (Rabbit) 0.8 out of 8.0 based on a 72 hour observation

#### COMPONENT TOXICITY

Propionic Acid  
Lecithin  
Proprietary  
Fatty acids  
Proprietary  
- Oral Toxicity: 2,001.00 mg/kg (Rat)

SECTION 11 NOTES: None

## SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not available

ECOTOXICITY: Not available

BIOACCUMULATIVE POTENTIAL: Not available

MOBILITY IN SOIL: Not available

OTHER ADVERSE EFFECTS: Not available

SECTION 12 NOTES: None

## SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not contaminate water, food or feed by storage or disposal. Dispose of contents in container to an approved waste disposal facility in accordance with all federal, state and local regulations.

CONTAINER DISPOSAL: Triple rinse (or equivalent) adding rinse water to application tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by local regulations.

RCRA HAZARD CLASS: None

SECTION 13 NOTES: None

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## SECTION 14: TRANSPORT INFORMATION

### U.S. DEPARTMENT OF TRANSPORTATION

**NMFC Proper Shipping Name:** Adhesive, Adjuvants, Spreaders or Stickers, Sprayable Product, Dry or Liquid

**DOT Shipping Description:**

**PROPER SHIPPING NAME:** Combustible Liquid, N.O.S.  
**HAZARD CLASS:** 3  
**ID NUMBER:** NA1993  
**PACKING GROUP:** III  
**LABEL STATEMENT:**



120 gallons or more must be placarded as Combustible

**NOT REGULATED AS CORROSIVE** WHEN TRANSPORTED BY MOTOR VEHICLE OR RAILCAR IN PACKAGING THAT WILL NOT REACT WITH OR BE DEGRADED BY THIS MATERIAL SUCH AS HDPE OR STAINLESS STEEL - 49 CFR 173.154 (d).

Average rate of corrosion for STEEL Coupon test 0.4316 mm/yr  
Average rate of corrosion for ALUMINUM ALLOY Coupon test .0231 mm/yr

**U.S. Surface Freight Classification:** ADHESIVES, ADJUVANTS, SPREADERS OR STICKERS (NMFC 4610; CLASS: 60) Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

**OTHER AGENCIES:** None

**SECTION 14 NOTES:** None

## SECTION 15: REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** Mixture not listed or excluded from listing

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Not Regulated

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):** Not Regulated

**311/312 HAZARD CATEGORIES:** None

**313 REPORTABLE INGREDIENTS:** None

**INTERNATIONAL REGULATIONS:** None

**SECTION 15 NOTES:** None

## SECTION 16: OTHER INFORMATION

**OTHER INFORMATION:** None

### DISCLAIMER:

The recommendation for safe handling and protection procedures is believed to be generally suitable for the standard uses of this compound. However, each user should identify his intended uses of this material and determine whether they are appropriate. All data included in this document is released as typical values and should not be utilized to determine the suitability of this material for a particular use or purpose. No warranty, either expressed or implied, is hereby made, nor do we give permission, inducement, or recommendations to practice any patented invention without a license. All data is offered for consideration, investigation and verification purposes only.