

MATERIAL SAFETY DATA SHEET

40891

INHIBITED SULFAMIC ACID

Latest Revision Date...04/26/07

Print Date.....04/26/07

SECTION 1

MANUFACTURER INFORMATION

QUES INDUSTRIES, INC.
5420 W. 140TH STREET
CLEVELAND, OHIO 44142
PH (216) 267-8989 FAX (216) 267-8998

FOR CHEMICAL EMERGENCY
CALL INFOTRAC @ 1-800-535-5053
24 HRS/DAY, 7 DAYS/WEEK

SECTION 2

PRODUCT IDENTIFICATION

PRODUCT NUMBER..... Q ISA
TRADE NAME OR CHEMICAL NAME... INHIBITED SULFAMIC ACID
SYNONYMS..... NA
CHEMICAL FAMILY..... Dry Acidic Descaler
NFPA - HEALTH HAZARD..... 2
FIRE HAZARD..... 0
REACTIVITY HAZARD..... 1
NFPA SCALE..... 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant
KEY..... NA= Not Applicable ND= Not Determined

SECTION 3

HAZARDOUS INGREDIENTS

| CHEMICAL NAME(S) | CAS NUMBER | % WT | TLV-TWA | PEL | SEC.313 | CARCINOGEN? |
|------------------|------------|------|---------|-----------------|---------|-------------|
| Sulfamic Acid | 5329-14-6 | >95 | 1 mg/m3 | Not Established | No | No |

SECTION 4

SHIPPING DATA

D.O.T. PROPER SHIPPING NAME... Sulfamic Acid, Mixture
D.O.T. HAZARD CLASS..... Corrosive Material Class 8
D.O.T. LABELS REQUIRED..... Corrosive
UN/NA I.D. NUMBER..... UN 2967
PACKAGING GROUP..... III
NON-BULK SHIPPING NAME..... Sulfamic Acid, Mixture, 8, UN 2967, PG III
BULK SHIPPING NAME..... NA

SECTION 5

PHYSICAL DATA

BOILING/FREZZING POINT @760 mmHg... NA
pH..... 1.3 (1% Solution)
VAPOR PRESSURE mm Hg @20° C..... NA
VAPOR DENSITY (Air = 1)..... NA
PERCENT VOLATILE BY WEIGHT (%)..... 0
SPECIFIC GRAVITY @20°C..... NA
SOLUBILITY IN WATER..... 20%
EVAPORATION RATE..... NA
APPEARANCE AND ODOR..... Orange/red crystalline powder with faint odor.

SECTION 6

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Test Method)..... NA
AUTOIGNITION TEMPERATURE..... NA
FLAMMABILITY LIMITS IN AIR (% V)... NA

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SECTION 6

FIRE AND EXPLOSION HAZARD DATA

CONT'D

EXTINGUISHING MEDIA..... Not Combustible
SPECIAL FIRE FIGHTING PROCEDURES... Wear self-contained breathing apparatus.
UNUSUAL FIRE & EXPLOSION HAZARDS... Oxides of sulfur or ammonia gas may be released.

SECTION 7

REACTIVITY DATA

PRODUCT STABILITY..... Stable
Conditions to Avoid..... NA
CHEMICAL INCOMPATIBILITY..... Strong alkalis, chlorine, hypochlorous acid, hypochlorites, cyanides and sulfides.
HAZARDOUS DECOMPOSITION PRODUCTS... Oxides of sulfur, ammonia
HAZARDOUS POLYMERIZATION..... Will Not Occur

SECTION 8

HEALTH HAZARD DATA

SKIN CONTACT... May be corrosive to skin upon extended contact.
EYE CONTACT... May be corrosive to corneal tissues.
INHALATION.... May cause irritation to nose and throat.
INGESTION..... May be corrosive to esophageal linings.

SECTION 9

EMERGENCY AND FIRST AID PROCEDURES

SKIN.....Remove contaminated clothing and flush exposed skin with soap and water. If irritation persists or develops, get medical attention. Launder contaminated clothing before reuse.
EYES.....Immediately flush eyes with large amounts of water for 15 minutes and get medical attention.
INGESTION...If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately. Never give anything by mouth to an unconscious person.
INHALATION...Move to fresh air. Aid in breathing, if necessary, and get medical attention.

SECTION 10

ENVIRONMENTAL DATA

SPILL OR LEAK PROCEDURES... Avoid skin contact. Carefully sweep up and place non-useable material in suitable container for disposal. Flush neutralized residues with water to sanitary sewer.
WASTE DISPOSAL METHOD..... Corrosive. Dispose of in accordance with all federal, state and local regulations.
HAZARDOUS WASTE 40CFR261... Yes. Hazardous Waste Number: D002
CONTAINER DISPOSAL..... Empty containers may contain residuals. Thoroughly clean, then offer for recycling, reuse, or disposal in accordance with governmental regulations.

SECTION 11

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION.....NIOSH/MSHA approved filter type mask for dusts, fumes and mists as needed to maintain P.E.L.
VENTILATION.....Local and/or mechanical exhaust to maintain exposure below P.E.L.
PROTECTIVE CLOTHING.....Neoprene gloves, apron, boots - as necessary to prevent skin contact.
EYE PROTECTION.....Chemical goggles.
OTHER PRECAUTIONS.....Safety shower and eyewash fountains should be easily accessible.

SECTION 12

SUPPLIER INFORMATION

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of manufacturer. The data on this sheet relates only to the specific material designated herein. Manufacturer assumes no legal responsibility for use or reliance upon this data.