

# MATERIAL SAFETY DATA SHEET

## SECTION 1 – Product Name and Company Identification

**Trade Name:** FuSyn-22/ISO22 Synthetic Alkylates

**Chemical Family/Name:** Alkylates with near linear C<sub>11</sub> to C<sub>15</sub> alkyl side chains

**CAS Number:** 68855-24-3, 85117-41-5

**Name of Manufacture/Supplier:** Fomosan Union Chemical Corp.

14F, No.206, Sec. 2, Nanking E. Rd., Taipei, Taiwan

Tel: 886-2-25071234 FAX: 886-2-25071664

E-mail: [fucc@fucc.com.tw](mailto:fucc@fucc.com.tw)

## SECTION 2 – Hazardous Identification

**Emergency Overview:** Slight eye and skin irritant. Harmful if swallowed

**Eyes:** Expected to cause no more than minor eye irritation. Application of a similar product into the eyes of rabbits produced very slight membrane irritation without corneal injury. Avoid eye contact as good industrial practice.

**Skin:** Not a primary skin irritant but may cause skin irritation on repeated or prolonged contact. Application of a similar product onto the skin of rabbits produced slight erythema and edema. Not expected to be acutely toxic by skin absorption. The acute dermal LD<sub>50</sub> (rabbits) was greater than 5g/kg for a similar product.

**Inhalation:** Avoid breathing vapor or mist. Under normal use conditions, this product is not an inhalation hazard. Prolonged exposure to vapors may cause dizziness and headaches.

**Ingestion:** May cause nausea. Not expected to be acutely toxic by ingestion. The acute oral LD<sub>50</sub> (rat) was greater than 5 g/kg for a similar product.

## SECTION 3 – Composition/Information Ingredients

No ingredients listed in the composition of this product are considered as hazardous by definition of OSHA's Hazard Communication Standard (29 CFR 1910.1200) nor considered carcinogen by IARC, ACHIG, NTP, or OSHA

## SECTION 4 – First Aid Measure

**Eyes contact:** Immediately flush eyes with plenty of water for at least 15 minutes while holding the eyelids open. If irritation persists, see a physician.

**Skin contact:** Remove contaminated clothing. Wash skin thoroughly with soap and water. Launder contaminated clothing. See a doctor if irritation persists.

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Remove material from eyes, skin and clothing.

**Ingestion:** If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person. If medical advice cannot be obtained, take the person, product container and MSDS to the nearest medical emergency center.

## SECTION 5 – Fire fighting measure

**Flash point (COC method):** > 215<sup>0</sup>C (>419<sup>0</sup>F)

**Auto ignition temperature:** >350<sup>0</sup>C

**Flammable limits (lower):** not available

**Flammable limits (upper):** not available

**Firefighting equipment and instructions:** Water, fog, or regular spray (small and large fire), dry chemical, CO2 (small fire) may be used. Move containers away from fire area if you can do so without harm/risk. Do not scatter spilled material with high pressure water streams. Withdraw immediately in case of rising sound from venting device or any discoloration of tanks due to fire. Always stay away from tanks engulfed in flames. If tank, rail car or tank truck is involved in a fire, keep a distance of 800 meters (half a mile) away from the fire

**Decomposition temperatures in air:** prolong heating at  $>180^{\circ}\text{C}$

#### SECTION 6 – Accidental Release Measures

**Spills, leaks or releases:** CAUTION: Spillage may be slippery. Restrict access to area until completion of clean up. Wear adequate personal protective equipment. To prevent contamination of waterways, dike spill and collect using absorbent material or sand. Collect spilled material in appropriate container

Clean up spills immediately to prevent soil or water contaminations. Notify appropriate authority.

#### SECTION 7 – Handling and Storage

**Handling:** After handling this product, wash hands before eating, drinking. Avoid contact with skin, eyes, and clothing. If contact occurs, remove contaminated clothing. If needed, take first aid action shown in Section IV.

**Storage Temperature:** Ideal storage temperature is  $10\text{-}27^{\circ}\text{C}$  ( $50\text{-}80^{\circ}\text{F}$ ). Do not expose sealed containers to temperature above  $40^{\circ}\text{C}$  ( $104^{\circ}\text{F}$ )

#### SECTION 8 – Exposure Control / Personal Protection

**Eyes:** No special eye protection is necessary. Avoid eye contact as good industrial practice.

**Skin:** Avoid prolonged or frequently repeated contact. Skin contact can be minimized by wearing impervious protective clothing including gloves.

**Respiratory:** Avoid breathing vapor or mist. Use NIOSH/MSHA approved respiratory equipment when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application.

**Ventilation:** Mechanical ventilation is recommended if handling at elevated temperatures or if it is handled in such a manner as to cause mists or vapor to form.

#### SECTION 9 – Physical and Chemical Properties

**Appearance:** bright & clear, light yellow liquid

**Odor:** odorless typical to synthetic oils

**Vapor pressure:**  $<2 \times 10^{-5}$  mmHg @  $40^{\circ}\text{C}$

**Viscosity at  $40^{\circ}\text{C}$ :** 20.5 ~ 22 cSt

**Pour point:**  $<-50^{\circ}\text{C}$

**Density (at  $15.6^{\circ}\text{C}$ ):** 0.85 – 0.87 g/cm<sup>3</sup>

**Average Molecular Weight:** 405-414

#### SECTION 10 – Stability and Reactivity

**Stability:** Stable (Thermal, Light)

**Incompatibility:** May react with strong oxidizing materials

**Hazardous Decomposition Products:** Normal combustion forms carbon dioxide and water vapor. Incomplete combustion can form carbon monoxide.

**Hazardous Polymerization:** Will not occur

#### SECTION 11 – Toxicological Information

The acute dermal LD<sub>50</sub> (rabbits) was greater than 5g/kg for a similar product.

The acute oral LD<sub>50</sub> (rat) was greater than 5 g/kg for a similar product.

## SECTION 12 – Ecological Information

Environmental Toxicity Information for a Similar Product is provided herein:

96-hr LC<sub>50</sub> Rainbow Trout: >1000 mg/l practically non-toxic

96-hr LC<sub>50</sub> Sheepshead Minnow: >1000 mg/l practically non-toxic

Biodegradation: This material is not expected to be readily biodegradable

## SECTION 13 – Disposal Considerations

**Wastes code** not established

**Disposal Instructions:** Dispose in accordance with all applicable regulations. A special treatment as infectious material is mandatory in compliance with local regulations (disinfection and incineration). Consult authorities before disposal

## SECTION 14 – Transportation Information

**DOT classification:** Not regulated as dangerous goods

**CTDG classification:** Not regulated as dangerous goods

**General:** Not regulated as dangerous goods

**Further information:** Not established

## SECTION 15 – Regulatory Information

**This product is listed on the following regulatory inventory:** Australia (AICS), Canada (DSL), China (CCS), Europe (EINECS), Japan (ENCS), Korea (KICS), Philippines (PICCS), US & Puerto Rico (TSCA)

**US Federal Regulations:** This product is not known to be a “hazardous Chemical” as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. All components are on the US EPA TSCA list

**State Regulations:** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive hazard

**Occupational Safety and Health Administration (OSHA):**

**1910.H.119 PSM Highly Hazardous Chemicals:** Not listed

**1910.Z.1200 Hazardous Chemical”:** Not listed (see Section 2)

**EPA CERCLA 302.4 List of Hazardous Substances:** Not listed

**EPA CWA 116.4 List of Hazardous Substances:** Not listed

**EPA CERCLA 372 SARA Titles III 313 Toxic Chemicals/Categories:** not listed

**EPA CAA Hazardous Air Pollutants:** not listed

**EPA CERCLA SARA Title III 311/312 Hazard Categories**

**Delay Hazard – No**

**Fire Hazard – No**

**Pressure Hazard – No**

**Reactivity Hazard – No**

## SECTION 16 – Other Information

**HMS Ratings: Health-1, Flammability Classification – 1; Physical - 0**

**NFPA Ratings: Health-1, Flammability Classification – 1; Instability - 0**

**Disclaimer:** The information provided in this Safety Data Sheet is believed to be accurate to the best of our knowledge and is intended as the guidance for safe handling, storage, transportation, disposal, and release of the product. Since the product can be used in combination with other materials and modified to fit the use of various processes and conditions beyond our control, Formosan Union Chemical Corp., makes no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use.