
[MATERIAL SAFETY DATA SHEET(MSDS)]

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FIRST COLOR CO.,LTD.
1236-1, JUNGWANG-DONG, SHIHUNG,
KYOUNGGI-DO, KOREA.

EMERGENCY TELEPHONE NUMBER:
TEL: 82-31-432-6977
FAX: 82-31-432-6329

TRADE NAMES/SYNONYMS: FIRST RED C-200
C.I.PIGMENT RED 53:1
C34H26BACL2N4O8S2; OHS18873; RTECS DB5500000

CHEMICAL FAMILY: azo

CREATION DATE: Feb 28 1990
REVISION DATE: May 09 2007

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: LAKE RED 53:1
CAS NUMBER: 5160-02-1
EC NUMBER (EINECS): 225-935-3
PERCENTAGE: >96.0

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=1 REACTIVITY=0
EC CLASSIFICATION (CALCULATED): No classification assigned.

EMERGENCY OVERVIEW:

COLOR: orange to red

PHYSICAL FORM: crystals

MAJOR HEALTH HAZARDS: No significant target effects reported.

PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: same as effects reported in other routes of exposure,
irritation, difficulty breathing

LONG TERM EXPOSURE: no information on significant adverse effects

SKIN CONTACT:

SHORT TERM EXPOSURE: irritation, nausea, vomiting, diarrhea, stomach pain

LONG TERM EXPOSURE: no information on significant adverse effects

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information on significant adverse effects

INGESTION:

SHORT TERM EXPOSURE: metallic taste, ringing in the ears, nausea, vomiting, diarrhea, stomach pain, difficulty breathing, drowsiness, dizziness, blurred vision, bluish skin color, kidney damage, paralysis

LONG TERM EXPOSURE: no information on significant adverse effects

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

SECTION 4 FIRST AID MEASURES

INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Slight fire hazard. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: regular dry chemical, carbon dioxide, water, regular foam
Large fires: Use regular foam or flood with fine water spray.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

WATER RELEASE:

Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers. Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

OCCUPATIONAL RELEASE:

Do not touch spilled material. Stop leak if possible without personal risk. Small spills: Absorb with sand or other non-combustible material. Collect with absorbent into suitable container. Small dry spills: Collect spilled material in appropriate container for disposal. Move containers away from spill to a safe area. Large spills: Dike for later disposal. Keep unnecessary people away, isolate hazard area and deny entry.

SECTION 7 HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

LAKE RED C' CONC & LAKE RED C-530

BARIUM, SOLUBLE COMPOUNDS (as Ba):

0.5 mg/m³ OSHA TWA

0.5 mg/m³ ACGIH TWA

0.5 mg/m³ NIOSH recommended TWA 10 hour(s)

VENTILATION: Provide local exhaust or process enclosure ventilation system.

Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.

Measurement Element:

Barium (Ba)

5 mg/m³

Any dust and mist respirator.

Any supplied-air respirator.

12.5 mg/m³

Any supplied-air respirator.

Any powered, air-purifying respirator with a dust and mist filter.

25 mg/m³

Any air-purifying respirator with a full facepiece and a high-efficiency particulate filter.

Any supplied-air respirator with a full facepiece.

Any powered, air-purifying respirator with a full facepiece and a high-efficiency particulate filter.

Any self-contained breathing apparatus with a full facepiece.

Any supplied-air respirator with a full facepiece.

50 mg/m³

Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode.

Escape -

Any air-purifying respirator with a full facepiece and a high-efficiency particulate filter.

Any appropriate escape-type, self-contained breathing apparatus.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid

COLOR: orange to red

PHYSICAL FORM: crystals

ODOR: Not available

MOLECULAR WEIGHT: 890.96

MOLECULAR FORMULA: C34-H26-CL2-N4-O8-S2.BA
BOILING POINT: Not applicable
MELTING POINT: Not available
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Not applicable
SPECIFIC GRAVITY: Not available
WATER SOLUBILITY: <3.5%
PH: Not applicable
VOLATILITY: Not applicable
ODOR THRESHOLD: Not available
EVAPORATION RATE: Not applicable
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available
SOLVENT SOLUBILITY:
 Slightly Soluble: ethanol
 Insoluble: acetone, benzene

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid generating dust. Keep out of water supplies and sewers.

INCOMPATIBILITIES: oxidizing materials

HAZARDOUS DECOMPOSITION:

 Thermal decomposition products: oxides of carbon, nitrogen, sulfur, barium, halogenated compounds

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

CARCINOGEN STATUS: IARC: Human Inadequate Evidence, Animal Limited Evidence, Group 3

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: respiratory disorders

TUMORIGENIC DATA: Available.

MUTAGENIC DATA: Available.

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Hazardous Waste Number(s): D005. Dispose of in accordance with U.S. EPA 40 CFR 262 for concentrations at or above the Regulatory level. Regulatory level- 100.0 mg/L. Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): N

SARA SECTION 302 (40CFR355.30): N

SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): Y

 BARIUM, SOLUBLE COMPOUNDS (as Ba)

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

 ACUTE: N

 CHRONIC: N

 FIRE: N

 REACTIVE: N

 SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

EUROPEAN REGULATIONS:

 EC NUMBER (EINECS): 225-935-3

SECTION 16 OTHER INFORMATION

MSDS SUMMARY OF CHANGES

 SECTION 3 HAZARDS IDENTIFICATION

 SECTION 10 STABILITY AND REACTIVITY

 SECTION 11 TOXICOLOGICAL INFORMATION

 SECTION 12 ECOLOGICAL INFORMATION

 SECTION 15 REGULATORY INFORMATION