[MATERIAL SAFETY DATA SHEET (MSDS)] SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION EMERGENCY TELEPHONE NUMBER: FIRST COLOR CO., LTD. TEL: 82-31-432-6977 1236-1, JEUNGWANG-DONG, SHIHUNG, KYOUNGGI-DO, KOREA. FAX: 82-31-432-6329 SUBSTANCE: C.I. PIGMENT RED 170 TRADE NAMES/SYNONYMS: FIRST RED 1700 2-NAPHTHALENECARBOXAMIDE, 4-((4-(AMINOCARBONYL)PHENYL)AZO)-N-(2-ETHOXY PHENYL)-3-HYDROXY-; 4-((4-(AMINOCARBONYL)PHENYL)AZO)-N-(2- ETHOXYPHENYL)-3-HYDROXY-2-NAPHTHALENECARBOXAMIDE; 2-NAPHTHO-O-PHENETIDIDE. 4-((P-CARBAMOYLPHENYL)AZO)-3-HYROXY-; 4-((P-CARBAMOYLPHENYL)AZO)-3-HYDROXY NAPHTHO-O-PHENETIDIDE; C.I. 12475; PIGMENT RED 170; C26H22N4O4; OHS69341 CHEMICAL FAMILY: azo CREATION DATE: Aug 19 1991 REVISION DATE: Jun 09 2007 SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS COMPONENT: C.I. PIGMENT RED 170 CAS NUMBER: 2786-76-7 EC NUMBER (EINECS): 220-509-3 PERCENTAGE: 100.0 SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=1 REACTIVITY=0

EC CLASSIFICATION (CALCULATED): No classification assigned.

EMERGENCY OVERVIEW:

COLOR: red

PHYSICAL FORM: powder

ODOR: odorless

MAJOR HEALTH HAZARDS: No significant target effects reported.

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

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

SKIN CONTACT:

SHORT TERM EXPOSURE: no information on significant advere effects

LONG TERM EXPOSURE: no information is available

EYE CONTACT:

SHORT TERM EXPOSURE: no information is available LONG TERM EXPOSURE: no information is available

INGESTION:

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

LONG TERM EXPOSURE: no information is available

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.

Do not scatter spilled material with high-pressure water streams. Dike for later disposal. 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

OCCUPATIONAL RELEASE:

Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. 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. Store in a tightly closed container. Keep separated from incompatible Substances.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

C.I. PIGMENT RED 170:

No occupational exposure limits established.

VENTILATION: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrateions of material are present. 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: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any dust, mist, and fume respirator.

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

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

Any powderd, air-purifying respirator with a high-efficiency particulate filter.

For Unknown Concentrations or Immediately Dangerous to Life of Health -

Any supplied-air respirator with full facepiece and operate 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

COLOR: red	
PHYSICAL: powder	
ODOR: Not: odorless	
MOLECULAR WEIGHT: 454.48	
MOLECULAR FORMULA: C26-H22-N4-04	
BOILING POINT: Not applicable	
MELTING POINT: Not available	
VAPOR PRESSURE: Not applicable	
VAPOR DENITY: Not applicable	
SPECIFIC GRAVITY: Not available	
WATER SOLUBILITY: insoluble	
PH: Not applicable	
VOLATILITY: Not applicable	
ODOR THRESHOLD : Not applicable	
EVAPORATION RATE: Not applicable	
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available	
SECTION 10 STABILITY AND REACTIVITY	
RECTIVITY: Stable at normal temperatures and pressure.	
COMPUTIONS TO ANOTH A SILL AS I I I I I I I I I I I I I I I I I I	
CONDITIONS TO AVOID: Avoid heat, flamed, sparks and other sources of ignition.	
Avoid contact with incompatible materials.	
BICOMPATIDII ITIEG	
INCOMPATIBILITIES: oxidizing materials	
HAZADDOUS DECOMPOSION.	
HAZARDOUS DECOMPOSION: Thermal decomposition products acid balides, avides of carbon, nitrogen	
Thermal decomposition product: acid halides, oxides of carbon, nitrogen	
POLYMEDIZATION: Will not polymerize	
POLYMERIZATION: Will not polymerize.	
SECTION 11 TOXICOLOGICAL INFORMATION	
DECION II TOAICOLOGICAL INFORMATION	

PHYSICAL STATE: solid

C.I. PIGMENT RED 170:

TOXICITY DA	ΓΑ:
10000 mg/kg	oral-rat LD50
ACUTE TOXIC	CITY LEVEL: Insufficient Data.
ADDITIONAL	DATA: May cross react with similar compounds.
	ECOLOGICAL INFORMATION
Not available	
SECTION 13	DISPOSAL CONSIDERATIONS
Dispose in acco	rdance with all applicable regulations.
SECTION 14	TRANSPORT INFORMATION
No classification	n assigned.
SECTION 15	REGULATORY INFORMATION
U.S. REGULAT	TIONS:
TSCA INVE	NTORY STATUS: Y
TSCA 12(b) I	EXPORT NOTIFICATION: Nor listed.
CERCLA SE	CTION 103 (40CFR302.4): N
SARA SECT	ION 302 (40CFR355.30): N
SARA SECT	ION 304 (40CFR355.40): N
SARA SECT	ION 313 (40CFR372.65): N
SARA HAZA	ARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):
ACUTE: N	
CHRONIC	2: N
FIRE: N	
REACTIV	
SUDDEN	RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: Y EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 220-509-3

.....

SECTION 16 OTHER INFORMATION

A backslash is the left and margin indicates an amendment from the previous version.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties.

Recipients of our product must take responsibility for observing existing laws and Regulations.