
S A F E T Y D A T A S H E E T

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SECTION 1 - IDENTIFICATION OF THE PREPARATION AND THE SUPPLIER

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PRODUCT NAME : BUEHLER RED PIGMENTS FOR CASTABLE MOUNTS
 IDENTIFICATION NUMBER: 20-8504
 PRODUCT USE/CLASS : Epoxy additive

SUPPLIER:

Buehler UK, Ltd.	Buehler GmbH
Saturn Building	In der Steele 2, 40599 Düsseldorf
101, Lockhurst Lane	Postfach 16 03 55, 40599 Düsseldorf
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PREPARER: Technical Department, PHONE: +18472955600, PREPARE DATE: 27/01/03

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SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

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ITEM	----- CHEMICAL NAME -----	CAS NUMBER	WT/WT%
01	Permanent red Classification: No information; N.E.	7023-61-2	10.0-30.0
02	Barium red Classification: No information; N.E.	7585-41-3	5.0-10.0
03	Alkyl glycidyl ether Classification: Not Applicable.	68609-97-2	5.0-10.0
04	Epoxy resin Classification: Xi, N; R36/38-43-51/53	25068-38-6	60.0-100.0

----- EXPOSURE LIMITS -----

ITEM	U/K		GERMANY		OTHER	SKIN
	8-HR REL	15-MIN STEL	8-HR MAK	15-MIN MAK	8-HR TWA	
01	N.E.	N.E.	N.E.	N/E	N.E.	NO
02	N.E.	N.E.	N.E.	N/E	N.E.	NO
03	N.E.	N.E.	N.E.	N/E	N.E.	NO
04	N.E.	N.E.	N.E.	N/E	N.E.	NO

(See Section 16 for abbreviation legend)

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SECTION 3 - IDENTIFICATION OF HAZARDS

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EMERGENCY OVERVIEW: (R43) May cause sensitisation by skin contact.
 (R51/53) Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (R36/38) Irritating to eyes and skin.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT, EYE CONTACT,

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SECTION 4 - FIRST AID MEASURES

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EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash skin with soap and water. Get medical attention.

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

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SECTION 4 - FIRST AID MEASURES

INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

NOTES TO PHYSICIAN: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 104 C

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: No data

EXTINGUISHING MEDIA: CO2, DRY CHEMICAL, FOAM, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

SPECIAL FIREFIGHTING PROCEDURES: Treat as petroleum fire. Wear appropriate approved protective equipment. Avoid directing water stream directly into flame; it may cause frothing with subsequent spread of flame.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Reclaim clean material. Prevent washings from entering waterways. Place contaminated material in covered waste container and dispose of in accordance with local and national regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid contact with eyes, skin, and clothing. Follow good general industrial safety practices during use and handling. FOR INDUSTRIAL USE ONLY.

STORAGE: KEEP OUT OF THE REACH OF CHILDREN.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate.

RESPIRATORY PROTECTION: None normally required under good general industrial ventilation.

SKIN PROTECTION: Clean clothing to cover skin. Rubber or synthetic gloves.

EYE PROTECTION: Chemical splash goggles.

OTHER PROTECTIVE EQUIPMENT: Not Applicable.

HYGIENIC PRACTICES: DO NOT reuse empty containers.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE : 216 - 304 C VAPOR DENSITY : Is heavier than air
ODOR : Mild nondescript ODOR THRESHOLD : No data
APPEARANCE : Red EVAPORATION RATE: Is slower than Butyl Acetate

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 SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES
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SOLUBILITY IN H2O : Negligible
 FREEZE POINT : No data SPECIFIC GRAVITY: 1.1047
 VAPOR PRESSURE : Negligible pH @ 100.0 % : N/A
 PHYSICAL STATE : Liquid VISCOSITY : Medium
 COEFFICIENT OF WATER/OIL DISTRIBUTION: No data
 (See Section 16 for abbreviation legend)

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 SECTION 10 - STABILITY AND REACTIVITY
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CONDITIONS TO AVOID: Not Applicable.

INCOMPATIBILITY: Strong Lewis or mineral acids. Strong bases or oxidants.
 Reaction with amines and mercaptans in large amounts or under uncontrolled
 conditions releases considerable heat and may release acrid fumes.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

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 SECTION 11 - TOXICOLOGICAL INFORMATION
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COMPONENT TOXICOLOGICAL INFORMATION:

----- CHEMICAL NAME -----	----- LD50 -----	----- LC50 -----
Permanent red	Not Applicable	Not Applicable
Barium red	Not Applicable	Not Applicable
Alkyl glycidyl ether	Derm-rbt >4.5 g/kg rat	>1.5mg/l/4Hr
Epoxy resin	Oral-rat=>11 g/kg	No deaths/satd air

Toxicological Test Data: None known.

ACUTE EFFECTS - EYE CONTACT: Moderately irritating to the eyes. Contact
 may cause pain, tearing, redness, and temporary swelling.

ACUTE EFFECTS - SKIN CONTACT: Contact causes skin irritation. May cause
 allergic skin reaction. Repeated or prolonged contact may cause
 sensitisation. Moderate irritant. Prolonged contact may cause dermatitis.

ACUTE EFFECTS - INHALATION: Liquid aspirated into lungs may cause serious
 injury or death. Vapours and/or aerosols which may be formed at elevated
 temperatures may be irritating.

ACUTE EFFECTS - INGESTION: Irritating to mouth, throat and stomach, with
 nausea.

CHRONIC OVEREXPOSURE EFFECTS: *Contact with skin may aggravate
 pre-existing skin disorders. *Contains a substance or substances shown to
 be mutagenic in in-vitro (test tube) assays.

ECOLOGICAL TEST DATA: Not Applicable.

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SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Incineration or fuels blending recommended if regulations permit. Mix resin and hardener according to product directions and allow to cure. When cured, product is non-hazardous, and may be placed in industrial or municipal landfill.

SECTION 14 - TRANSPORT INFORMATION

INTERNATIONAL SHIPPING NAME: Not considered a dangerous good for transport
INTERNATIONAL ID NUMBER: N/A
IMDG CLASS (10,20): N/A IMDG PAGE NUMBER: N/A
IMDG EMS: N/A IATA CLASS (10,20): N/A

SECTION 15 - REGULATORY INFORMATION

CHiP SUPPLY LABEL RISK PHRASES: (R36/38) Irritating to eyes and skin. (R43) May cause sensitisation by skin contact. (R51) Toxic to aquatic organisms. (R53) May cause long-term adverse effects in the aquatic environment.

CHiP SUPPLY LABEL SAFETY PHRASES: (S28) After contact with skin, wash immediately with plenty of water. (S37/39) Wear suitable gloves and eye/face protection. (S61) Avoid release to the environment. Refer to special instructions/safety data sheet. Contains epoxy constituents. See information supplied by the manufacturer. For industrial or professional use ONLY.

CHiP SUPPLY LABEL SYMBOLS: Irritant, Xi; Danger to the Environment, N

SECTION 16 - OTHER INFORMATION

PREVIOUS MSDS REVISION DATE: none
REASON FOR REVISION: new product

VOLATILE ORGANIC COMPOUNDS (VOCS): 0 grams/ltr (calculated)

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

ABBREVIATIONS: Administrative Revision Date: Reason for administrative revision: ACGIH = American Conference of Governmental Industrial Hygienists; UK = United Kingdom; REL = Recommended Exposure Limit; MAK = Maximale Arbetisplatzkonzentration (Maximum Concentration in the Workplace); TLV-TWA = Threshold Limit Value-Time Weighted Average (8 hours); STEL = Short-Term Exposure Limit (15 minutes); C = Ceiling Value; PEL = Permissible Exposure Limit

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