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

=====

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

=====

PRODUCT NAME : BUEHLER ANTHRACITE PAINT
 IDENTIFICATION NUMBER: R-8797
 PRODUCT USE/CLASS : Paint

SUPPLIER:

Buehler UK, Ltd.	Buehler GmbH
Saturn Building	In der Steele 2, 40599 Düsseldorf
101, Lockhurst Lane	Postfach 16 03 55, 40599 Düsseldorf
Coventry CV6 5SF ENGLAND	
TEL: (+44) (0) 24 7658 2158	Telefon: (+49) 0211-974100
FAX: (+44) (0) 24 7658 2159	Telefax: (+49) 0211-9741079

PREPARER: Technical Department, PREPARE DATE: 06/02/03

=====

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

=====

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%
01	Toluene Classification: FLAMMABLE F; HARMFUL Xn; R11-20	108-88-3	1.0-5.0
02	2-Heptanone Classification: Xn; Harmful; R10-R20/22	100-43-0	1.0-5.0
03	Isopropyl acetate Classification: F, Highly Flammable; Xi, Irritant; R36-R66-R67	108-21-4	10.0-30.0
04	n-Butyl acetate Classification: NONE; R10-66-67	123-86-4	5.0-10.0
05	Xylene Classification: HARMFUL, Xn; IRRITANT, Xi; R10-20/21-38	1330-20-7	1.0-5.0
06	Carbon Black Classification: No information; N.E.	1333-86-4	1.0-5.0

EXPOSURE LIMITS

ITEM	U/K		GERMANY		OTHER	SKIN
	8-HR REL	15-MIN STEL	8-HR MAK	15-MIN MAK	8-HR TWA	
01	50 ppm	150 ppm	100 ppm	N/E	100 ppm	NO
02	50ppm	N.E.	100ppm	N/E	50ppm	NO
03	250 ppm	310 ppm	250 ppm	310 ppm	250 ppm	NO
04	150 ppm	200 ppm	150 ppm	N.E.	N.E.	NO
05	100ppm	150ppm	100ppm	N/E	100	NO
06	3.5mg/m3	N.E.	3.5mg/m3	N/E	N.E.	NO

(See Section 16 for abbreviation legend)

=====

SECTION 3 - IDENTIFICATION OF HAZARDS

=====

EMERGENCY OVERVIEW: (R10) Flammable. (R20/21) Harmful by inhalation and in contact with skin. (R36) Irritating to eyes. (R66) Repeated exposure may cause skin dryness or cracking. (R67) Vapours may cause drowsiness and dizziness.

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

Continued on Page 2)

=====

SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Flush eye with water for 15 minutes. Get medical attention.

SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

INHALATION: If symptoms occur, remove to fresh air. Medical personnel may administer oxygen if breathing is difficult. Seek medical attention if symptoms persist.

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control centre immediately. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN: Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 4 C LOWER EXPLOSIVE LIMIT: 1.1 %
(SETAFLASH CLOSED CUP) UPPER EXPLOSIVE LIMIT: 7.9 %
AUTOIGNITION TEMPERATURE: No data

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

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapours are heavier than air, and may travel along the ground to be reignited at locations distant from the source; flashback of flame may occur. "Empty" containers may retain dangerous product residues or explosive vapors. Full or empty containers exposed to fire or direct heat may explode.

SPECIAL FIREFIGHTING PROCEDURES: Treat as petroleum fire.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Eliminate heat, sparks, flames, and sources of ignition if safe to do so. Wipe up residue with non-sparking tools. Wash spill area with mild detergent solution.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Use only in a well ventilated area. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid contact with skin and eyes. Follow good general industrial safety practices during use and handling. FOR PROFESSIONAL USE ONLY.

STORAGE: Store full and empty containers away from heat, sparks, flame, and other sources of ignition. Do not store in direct sunlight. KEEP OUT OF THE REACH OF CHILDREN.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate for limited use. Supplemental ventilation equipment should be approved for use with flammable vapours.

RESPIRATORY PROTECTION: If recommended safe exposure limits are exceeded, if use is performed in a poorly-ventilated space, or if inhalation effects occur, use approved organic vapour cartridge respirator.

Continued on Page 3)

Product: R-8797

Preparation Date: 06/02/03

Page 3

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

SKIN PROTECTION: Clean clothing to cover skin. Butyl rubber gloves.
Supported PVA gloves.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Not Applicable.

HYGIENIC PRACTICES: DO NOT smoke or eat during use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE : 88 - 151 C VAPOR DENSITY : Is heavier than air
ODOR : Strong solvent ODOR THRESHOLD : Appr 1 ppm
APPEARANCE : Black EVAPORATION RATE: Is slower than Butyl
SOLUBILITY IN H2O : Insoluble Acetate
FREEZE POINT : NO DATA SPECIFIC GRAVITY: 1.60
VAPOR PRESSURE : NO DATA pH @ 100.0 % : N/A
PHYSICAL STATE : Aerosol VISCOSITY : Very low
COEFFICIENT OF WATER/OIL DISTRIBUTION: No data
(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Prolonged exposure to heat.

INCOMPATIBILITY: Strong Lewis or mineral acids. Strong bases or oxidants.
Surface-active compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

COMPONENT TOXICOLOGICAL INFORMATION:

CHEMICAL NAME	LD50	LC50
Toluene	oral-rat 5000mg/kg	Mouse 5320 ppm/8H
2-Heptanone	oral(rat)1600mg/kg	Not Applicable
Isopropyl acetate	Oral rat 3.0 g/kg	No data
n-Butyl acetate	No Information	No information
Xylene	oral(rat)4300mg/kg	Not Applicable
Carbon black	No information	No information

Toxicological Test Data: Not Applicable.

ACUTE EFFECTS - EYE CONTACT: Severely irritating to the eyes. Contact may
cause injury to eye tissue if not removed promptly.

ACUTE EFFECTS - SKIN CONTACT: May be absorbed through the skin in harmful
amounts. Frequent or prolonged contact may irritate the skin and cause a
skin rash (dermatitis).

ACUTE EFFECTS - INHALATION: Harmful if inhaled. Liquid aspirated into
lungs may cause chemical pneumonitis. Can cause severe central nervous
system depression, including unconsciousness. Liquid particles breathed
into the lungs may cause injury to the lungs, liver, or kidneys. Causes

respiratory tract irritation. May cause drowsiness, headache, or nausea.
Continued on Page 4)

=====
Product: R-8797

Preparation Date: 06/02/03 Page 4

=====
SECTION 11 - TOXICOLOGICAL INFORMATION
=====

ACUTE EFFECTS - INGESTION: This material may be harmful or fatal if
swallowed.

CHRONIC OVEREXPOSURE EFFECTS: *Repeated inhalation of vapors from heated
material may cause respiratory sensitization with asthma-like response.
Previously sensitized persons may experience effects even at levels below
recommended safe exposure limits. *Teratogenicity (damage to fetus)
similar to that of fetal alcohol syndrome is found in human studies where
there is repeated excessive in-utero exposure toluene. Chronic toluene
abuse produces kidney damage. *Overexposure to xylene has been found to
cause anaemia, liver abnormalities, kidney damage, and/or eye damage in
animals. Repeated or prolonged overexposure may cause injury to the red
blood cells or damage to the central nervous system. *Studies suggest that
solvent chronic overexposure effects are targeted at the liver and central
nervous system. Deliberate and repeated inhalation of concentrated solvent
vapours may cause permanent neural injury. Consumption of alcohol in
conjunction with repeated solvent exposure may cause colour vision defects.

=====
SECTION 12 - ECOLOGICAL INFORMATION
=====

ECOLOGICAL TEST DATA: None known.

=====
SECTION 13 - DISPOSAL CONSIDERATIONS
=====

DISPOSAL METHOD: FLAMMABLE. Landfill disposal NOT recommended. Follow
local and national regulations for appropriate steps for disposal of full
and/or empty containers and contaminated or used equipment.

=====
SECTION 14 - TRANSPORTATION INFORMATION
=====

INTERNATIONAL SHIPPING NAME: IATA: Aerosols, Flammable
IMDG: Aerosols
INTERNATIONAL ID NUMBER: UN1950
IMDG CLASS (1ø,2ø): 2, none IMDG PAGE NUMBER: N/A
IMDG EMS: 213 IATA CLASS (1ø,2ø): 2.1, none

=====
SECTION 15 - REGULATORY INFORMATION
=====

CHiP SUPPLY LABEL RISK PHRASES: (R10) Flammable. (R20/21) Harmful by
inhalation and in contact with skin. (R36) Irritating to eyes.
(R66) Repeated exposure may cause skin dryness or cracking. (R67) Vapours
may cause drowsiness and dizziness.

CHiP SUPPLY LABEL SAFETY PHRASES: (S16) Keep away from sources of ignition
- no smoking. (S24) Avoid contact with skin. (S26) In case of contact
with eyes, rinse immediately with plenty of water and seek medical advice.
(S33) Take precautionary measures against static discharges.
For industrial and professional use only.

CHiP SUPPLY LABEL SYMBOLS: Highly Flammable, F Harmful, Xn

Continued on Page 5)

=====

=====

SECTION 16 - OTHER INFORMATION

=====

PREVIOUS MSDS REVISION DATE: 31/07/01
 REASON FOR REVISION: modified formula

VOLATILE ORGANIC COMPOUNDS (VOCS): 316 grams/ltr (calculated)

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

ABBREVIATIONS: 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

DISCLAIMER: To the best of our knowledge, the information contained in this MSDS is accurate or is obtained from sources believed to be accurate. However, no liability, expressed or implied, is assumed for the accuracy or completeness of the information contained herein. Buyer assumes liability in its use of the material.

=====
 =====
 <END OF MSDS>