

CCOA Vacutainer Brand Tubes
6383, 6428, 6446, 6470

B2998-52, -54, -61A, -62
B2950-25 B2951-85, -86, -87, -88

**BECTON
DICKINSON**

Becton Dickinson and Company

**Material Safety
Data Sheet**

SECTION 1 - IDENTITY

NAME Becton Dickinson VACUTAINER Systems		ADDRESS Stanley Street, E. Rutherford, NJ 07073	
TELEPHONE NUMBER (201) 460-2615	FOR ADDITIONAL INFORMATION CONTACT: Fu-chung Lin, Ph. D.		DATE PREPARED November 13, 1988
COMMON NAME (USED ON LABEL) VACUTAINER Brand Tubes 6383, 6428, 6446, 6470		CHEMICAL FAMILY Does not apply	
CHEMICAL NAME Does not apply		FORMULA Does not apply	
TRADE NAME & SYNONYMS VACUTAINER Brand Evacuated Blood Collection Tubes. VACUTAINER, trademark of the Becton Dickinson and Company			

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENT	CAS #	% (wt)	TLV	PEL
Sodium Fluoride	7681-49-4	44.4	*	**
Potassium Oxalate	583-52-8	55.6	No TLV	No PEL

* As Fluorides (F) 2.5 mg/m³ TWA ** As Fluoride (F) 2.5 mg/m³

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).
TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists, 1987-88.

SECTION 3 - PHYSICAL DATA

BOILING POINT Not determined	SPECIFIC GRAVITY (H₂O=1) Not determined	VAPOR PRESSURE (mm Hg) Not determined
PERCENT VOLATILE BY VOLUME (%) Not determined	VAPOR DENSITY (AIR=1) Not determined	EVAPORATION RATE (_____ a¹) Not determined
SOLUBILITY IN WATER Soluble	REACTIVITY IN WATER Not determined	
APPEARANCE AND ODOR White powder or balls or clear, lustrous crystals; No characteristic odor.		

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT Not determined	FLAMMABLE LIMITS IN AIR (% by VOLUME) LOWER: Not determined UPPER: Not determined	
EXTINGUISHING MEDIA Use extinguishing media appropriate for surrounding fire.	AUTO IGNITION TEMPERATURE Not determined	
USUAL FIRE AND EXPLOSION HAZARDS May emit highly toxic fumes		
SPECIAL FIRE FIGHTING PROCEDURES None		

HEALTH INFORMATION

PRIMARY ROUTES OF EXPOSURE

Eye, skin, ingestion, inhalation

SIGNS AND SYMPTOMS OF EXPOSURE

(1) ACUTE OVEREXPOSURE -

INHALATION: Irritation or mucous membranes **INGESTION:** Irritation and burning sensation of lips, mouth, and throat, pain in swallowing, intense thirst **SKIN:** Burning sensation and inflammation, blisters, profound damage to tissues **EYES:** Burning sensation, watering of eyes, conjunctivitis, ulceration, possible damage to cornea and loss of vision.

(2) CHRONIC OVEREXPOSURE -

Fixation of calcium by fluorine, nausea, vomiting, diarrhea, abdominal burning and cramp-like pains, can cause severe bone changes, weight loss, dental defects, may cause renal tubule obstruction and kidney disturbance

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

May impair growth in young workers, diseases of bone or ligaments, or diseases of kidney or lung, pre-existing skin diseases

CHEMICAL/COMPONENT LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

None

NTP

IARC

OSHA

OTHER EXPOSURE LIMITS

None determined

Yes No

Yes No

Yes No

EMERGENCY & FIRST AID PROCEDURES

Remove victim from contaminated area and remove contaminated clothing, first aide's should take care not to be contaminated, wash skin or eyes with water for 15 minutes or longer, apply calcium gluconate gel 2.5% on the dried affected skin, notify physician, if victim coughs a great deal make him inhale vapors of ethyl alcohol or vapors of ether then give oxygen, blow nose if irritated, rinse mouth if material entered, do not let victim vomit, if ingested give large doses of effervescent calcium gluconate tablets (6) diluted in copious amounts of water or milk, if great pain persists after washing eyes put several drops of sterile calcium gluconate 10% solution (SANDOZ or equiv.), if eye pain persists repeat eye washing.

SECTION 6 - REACTIVITY DATA

STABILITY

Unstable Stable

CONDITIONS TO AVOID Not determined

INCOMPATIBILITY (MATERIALS TO AVOID)

Acid or acid vapors, furfuryl alcohol, Ag, NaClO₃, NaOCl

HAZARDOUS DECOMPOSITION PRODUCTS

Hydrogen fluoride, Fluorine, CO, CO₂

HAZARDOUS POLYMERIZATION

May Occur Will Not Occur

CONDITIONS TO AVOID

Not determined

SECTION 7 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED

Carefully sweep up material if dry, wear protective equipment to prevent inhaling, skin or eye contact; if liquid carefully dilute with water and absorb or flush to drain with copious amounts of water.

WASTE DISPOSAL METHOD

Dispose of wastes in accordance with Federal, State and local codes, normally small volumes can be disposed into a sewer system.

SECTION 8 - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

Normally not required, use NIOSH approved dust respirator for dry spills.

VENTILATION

General room ventilation

PROTECTIVE GLOVES

Not required, should use if contact with skin exists

EYE PROTECTION

Not normally required, should be used when potential of eye contact exists

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Emergency eye bath is recommended where there is possibility of eye contact

SECTION 9 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING

Store and handle according to packaged instructions.

OTHER PRECAUTIONS

Be prepared with proper emergency medical supplies in case of an accident

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