

4 FIRST-AID MEASURES

- **EYE CONTACT:**Gently rinse the affected eyes,including under the eyelids,with clean water for at least 15 minutes. Remove contact lenses if easily possible. Remove all chemicals from contact with victims eyes as quickly as possible. A delay of only seconds increase the injury. And refer for medical attention.
- **SKIN CONTACT:**Remove all contaminated clothing, shoes and socks from the affected areas as quickly as possible, cutting them off if necessary.Wash the affected areas under tepid running water using a mild soap. If irritation persists,arrange for transport to the nearest medical facility for examination and treatment by a physician as soon as possible.
- **INHALATION:**Remove the victim from the contamination immediately to fresh air. If breathing is weak,irregular or has stopped,open his airway, loosen his collar and belt and administer artificial respiration. And refer for medical attention.
- **INGESTION:**Do not induce vomiting.
Never give anything by mouth to someone who is unconscious or convulsing.If the victim is responsive,give him one or two glasses of milk or water. And refer for medical attention.

5 FIRE-FIGHTING MEASURES

- **EXTINGUISHING MEDIA:**
Dry chemical powder, foam, dry sand or carbon dioxide.
Water may be ineffective in extinguishing a fire involving this material.
- **SPECIFIC HAZARDS WITH REGARD TO FIRE-FIGHTING MEASURES:**
Toxic gases(carbon monoxide)will form upon combustion.

6 ACCIDENTAL RELEASE MEASURES

Evacuate non essential personnel.
Shut off all sources of ignition : No flare, smoking or flames in area.
Absorb spill with inert material(e.g.,dry sand or earth),then place in a chemical waste container with covers for disposal,using nonsparking tools.
Remove leaking containers to a safe place, if feasible.
Notify police and fire brigade.

7 HANDLING & STORAGE

- **HANDLING :** Use only in the well-ventilated areas.
Make available in the work area emergency shower and eyes wash.
Keep container tightly closed.
Avoid contact with skin or eyes.
Shut off all gas pilot and electrical(spark or hot wire)igniters and orther sources of ignition during use and until all vapors (odors)are gone.
Use reduced-sparking handtools.
Prevent build-up of electrostatic charges(e.g. by grounding).
Practice good personal hygiene after using this materials, especially before eating,drinking smoking or using the toilet.
- **STORAGE :** It should be kept in a tightly closed container, protected from physical damage, and away form oxidizing materials and sources of ignition.
Store in a cooll, dry,well-ventilated location.
Keep away form heat, steam pipe or sunlight.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

• CONTROL PARAMETERS:

CHEMICAL NAME	CAS.No.	ACGIH
Ethanol	64-17-5	1000ppm
1-Propanol	71-23-8	200ppm
Propan-2-ol	67-63-0	200ppm
Ethanol, 2-butoxy-	111-76-2	20ppm
2-Propanol, 1-methoxy-	107-98-2	100ppm
Carbon black	1333-86-4	3.5mg/m ³

•ENGINEERING MEASURES: Use exhaust ventilation to keep airborne concentration below exposure limit.

• PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION	Industrial canister gas masks.
EYE PROTECTION	Face shields
HAND,SKIN AND BODY PROTECTION	Impervious clothing. Chemical-resistant gloves,apron and impervious boots.

9 PHYSICAL & CHEMICAL PROPERTIES

•PHYSICAL STATE, FORM, APPEARANCE, COLOR: Black

•ODOR :Aromatic odor •DENSITY :0.965(25°C)

SOLUBILITY IN WATER	Slightly
SOLUBILITY IN ACETONE	Soluble
BOILING POINT	78.3°C(Ethanol) 120°C(2-Propanol, 1-methoxy-)
MELTING POINT	Not applicable
VAPOR PRESSUR	5333Pa (19°C Ethanol)

10 PHYSICAL HAZARD (STABILITY & REACTIVITY)

FLASH POINT	35°C
AUTOIGNITION TEMPERATURE	278.0°C
UPPER EXPLOSION LIMIT	19vol%
LOWER EXPLOSION LIMIT	2.10vol%
FLAMMABILITY	Flammable
SPONTANEOUS COMBUSTIBILITY	Not applicable
REACTIVITY WITH WATER	Not applicable
OXIDIZIBILITY	Not applicable
SELF-REACTIVITY	Not applicable
STABILITY & REACTIVITY	This material is stable at room temperature. Decomposition will occur at temperature above 250°C
HAZARDOUS DECOMPOSITION PRODUCTS	No data

11 TOXICOLOGICAL INFORMATION

- CORROSIVE AND IRRITANT PROPERTIES : No data
- ALLERGENIC AND SENSITIVE EFFECTS :No data
- ACUTE TOXICITY :

CHEMICAL NAME	Oral LD ₅₀
Ethanol	20,000mg/kg(rat)
1-Propanol	1,870mg/kg(rat)
Propan-2-ol	5,045mg/kg(rat)
Ethanol, 2-butoxy-	530mg/kg(rat)
2-Propanol, 1-methoxy-	5,660mg/kg(rat)
Carbon black	15,400mg/kg(rat)

- SUB-CHRONIC TOXICITY : No data
- CARCINOGENIC EFFECTS

	IARC
Propan-2-ol	3
Carbon black	2B

12 ECOLOGICAL INFORMATION

BIODEGRADABILITY	No data
BIOACCUMULATION	No data
FISH TOXICITY	No data

13 DISPOSAL CONSIDERATION

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material highly flammable. Do not flush into the sewer.

14 TRANSPORT INFORMATION

- Keep away from oxidizing materials and source of ignition.
- Take precautionary measures against static discharges.
- Any transportation practice must be in compliance with laws and regulation in your country or region.

15 REGULATORY INFORMATION

:Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

16 OTHER INFORMATION

- REFERENCES:

Paint Raw Harmful materials Datasheet JAPAN PAINT MANUFACTURERS ASSOCIATION