



Material Safety Data Sheet

Tri-valent Blue 8-04

Identification of substance

- Trade name : Tri-valent Blue 8-04
- Article number : 89413
- Supplier : Chin cha-roen interchem CO.,LTD.
- Further information obtainable from : Department laboratory

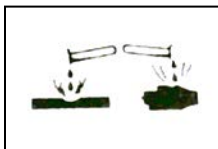
Composition/Data on components:

- Chemical characterization
- Description : Mixture of substances listed below with nonhazardous additions.
- Dangerous components:

1803	Sulphuric acid
1341-49-7	Ammonium hydrogendifluoride
	T, C; R 25-34
Chromium	nitrate solution
	C; r 34

Hazard identification

- Hazard description:



C Corrosive

- Information concerning to particlar hazards to man and environment

R 22 Harmful if swallowed.

R 34 Causes burns.

- Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Fire fighting measures

- Suitable extinguishing agents
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards caused by the substance, its products of combustion or resulting gases:
Formation of toxic gases is possible during heating or in case of fire.
- Protective equipment: No special measures required.

First aid measures

- General information
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation
For at least 48 hours after the accident.
- After inhalation
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact immediately rinse with water.
- After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing
Drink plenty of water and provide fresh air. Call for a doctor immediately.

Handling and storage

- Handling
- Information for safe handling :
Ensure good ventilation/exhaustion at the workplace.
- Information about fire-and explosion protection:
No special measures required.
- Storage
- Requirements to be met by storerooms and receptacles:
- Information about storage in one common storage facility :
Do not store together with alkalis (caustic solutions).
- For ther information about storage conditions:
Keep receptacle tightly sealed.
- Storage class

- Class according to regulation on flammable liquids : Void

Accidental release measures

- Person – related safety precaution:
Wear protective equipment. Keep unprotected persons away
- Measures for environmental protection
Do not allow to enter sewers / surface or ground water.
- Measures for cleaning/collecting:
Absorb with liquid – binding material (sand, diatomite, acid binders, universal binders, sawdust)
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.

Exposure controls and personal protection gear

- Additional information about design of technical facilities:
No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities or materials with critical values that have to be monitored at the workplace.
- Additional information :
The lists valid during the making were used as basis.
- Personal protective equipment
- General protective and hygienic measures
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
- Respiratory protection :
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- Protection of hands: Protective gloves.
- Eye protection: Tightly sealed goggles.

Physical and chemical properties:

- Form : Fluid

- Colour : Dark green
- Odour : Characteristic
- Change in condition
- Melting point/Molting ranga : undetermined
- Boiling point/Boiling range : 100 ° C
- Flash point : Not applicable
- Self-igniting : Product is not selfigniting.
- Danger of explosion : Product does not present an Explosion hazard.
- Vapour pressure : at 20 ° C 23 mbar
- Density : at 20 ° C 1.3 g/cm3
- Solubility in / Miscibility with
- Water ; Fully miscible
- pH-value : at 20 ° C 2.00

Stability and reactivity

- Thermal decomposition/conditions to be avoided:
No decomposition if used according to specifications.
- Dangerous reactions Reacts with alkali and metals
- Dangerous decomposition products :
No dangerous decomposition products known

Toxicological information

- Acute toxicity :
- Primary irritant effect:
- on the skin : Strong caustic effect on skin and mucous membranes.
- on the eye : strong caustic effect.
- Sensitization : No sensitizing effects known.
- Additional toxicological information:
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Ecological information :

- Information about elimination(persistence and degradability):

- Other information : No data available
- Ecotoxicological effects:
- Aquatic toxicity :
1341-49-7 ammonium hydrogendifluoride
LCO/96 h : 237 mg/l (Brachydanic rerio)
- General notes :
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralized.

Disposal considerations

- Product :
- Recommendation
Must be specially treated adhering to official regulations.
- Uncleaned packaging :
- Recommendation :
- Recommended cleansing agents:
Water, if necessary together with cleansing agents.

Transport information

- Land transport ADR/RID (cross-border)
- ADR/RID class : 8 Corrosive substances.
- Item : 17b
- Danger code (Kemler) : 80
- UN-Number: 3264
- Hazard label 8
- Description of goods : Corrosive liquid, acidic, inorganic, n.c.s., chromium nitrate solution
- Maritime transport IMDG :
- IMDG Class : 8
- Page : 8147-1
- UN Number : 3264
- Packaging group : II
- EMS Number : 8-15
- MFAG : 760

- Marine pollutant : No
- Proper shipping name : Corrosive liquid, acidic, inorganic, n.c.s., chromium nitrate solution
- Air transport ICAO-TI and IATA-DGR :
- ICAO/IATA Class : 8
- UN/ID Number : 3264
- Packaging group : II
- Proper shipping name Corrosive liquid, acidic, inorganic, n.c.s., chromium nitrate solution

Regulations

- Labelling according to EU guidelines:
- Code letter and hazard designation of product : C Corrosive
- Hazard- determining componente of labelling :
Ammonium hydrogendifluoride
Chromium nitrate solution
- Risk phrases :
22 Harmful if swallowed.
34 Causes burns.
- Safety phrases:
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37/39 Wear suitable gloves and eye/face protection.
41 In case of fire and/or explosion do not breathe fumes.
- National regulations
- Classification according to VbF : Void
- Waterhazard class : Water hazard class 2 (Self-assessment) : hazardous of water.

Other information :

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Compared with the pervious distribution modifications are mark with “*” on the left margin.

- Department issuing MSDS : Department laboratory