



Material Safety Data Sheet

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: B-808EX

Company name: Harima Chemicals, Inc.

Address: 671-4 Mizuashi, Noguchi-cho, Kakogawa, Hyogo JAPAN

A charge section: Environmental and Quality Management Department

Phone number: 81-79-422-3301

Fax number: 81-79-426-6008

Emergency phone number: 81-79-422-3301

Product code: 096511

Recommended use and restrictions: • Industrial use

2. HAZARDS IDENTIFICATION

GHS classification:

Physical hazards:

Flammable liquids: Category 2

Pyrophoric liquids: Not classified

Health hazards:

Acute toxicity-oral: Not classified

Acute toxicity-dermal: Not classified

Acute toxicity-inhalation(vapour): Not classified

Acute toxicity-inhalation(dust/mist): Classification not possible

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2

Respiratory sensitization: Classification not possible

Skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Category 1

Specific target organ toxicity-single exposure: Category 1 (respiratory apparatus, central nervous system)

Specific target organ toxicity-repeated exposure: Category 3 (airway irritation, anesthetic action)

Aspiration hazard: Category 1 (liver, kidney, central nervous system)

Aspiration hazard: Not classified

Environmental hazards:

Hazardous to the aquatic environment-acute: Category 2

Hazardous to the aquatic environment-chronic: Classification not possible

GHS label element:

Pictogram:



Signal word :

• Danger

Hazard statements :

- Highly flammable liquid and vapour
- Causes skin irritation
- Causes serious eye irritation
- May damage fertility or the unborn child <>
- Causes damage to organs (respiratory apparatus, central nervous system)
- Causes damage to organs (liver, kidney, central nervous system) through prolonged or repeated exposure
- Toxic to aquatic life
- A material which may cause serious hazard to human health an environmental creature or environment is contained.

Precautionary statement :

Prevention :

- Keep away from heat/sparks/open flames/hot surfaces. - No smoking. {Manufacturer/supplier or the competent authority to specify applicable ignition source(s).}
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting/.../equipment. {... Manufacturer/supplier or the competent authority to specify other equipment.}
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/eye protection/face protection {Manufacturer/supplier or the competent authority to specify type of equipment.}
- Wash ...thoroughly after handling. {... Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling.}
- Wear protective gloves. {Manufacturer/supplier or the competent authority to specify type of equipment.}
- Wear eye protection/face protection. {Manufacturer/supplier or the competent authority to specify type of equipment.}
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use personal protective equipment as required.
- Do not breathe dust/fume/gas/mist/vapours/spray. {Manufacturer/supplier or the competent authority to specify applicable conditions.}
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.

Response :

- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- In case of fire: Use Carbon dioxide, a bubble, powder. for extinction. {...Manufacturer/supplier or the competent authority to specify appropriate media.}
- IF ON SKIN: Wash with plenty of soap and water.
- Specific treatment (see ... on this label) {... Reference to supplemental first aid instruction.}
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- If exposed or concerned: Get medical advice/attention.
- IF exposed: Call a POISON CENTER or doctor/physician.
- Get medical advice/attention if you feel unwell.

Storage :

- Store in a well-ventilated place. Keep cool.
- Store locked up.

- Disposal : • Dispose of contents/container to ... {... in accordance with local/regional/national/international regulations (to be specified).}

3. COMPOSITION/INFORMATION ON INGREDIENTS

- Discrimination of single substance or mixture : A mixture.
- Chemical name or common name : Acrylic resin solution
- A chemical characteristic (chemical formulas) : No information.
- An ingredient :

No.	An ingredient name	CAS number	Concentration or concentration range
1	Acrylic resin	trade secret	≥38.0
2	Tackifier	trade secret	7.0
3	Toluene	108-88-3	41.0
4	Ethyl acetate	141-78-6	14.0
5	Vinyl acetate	108-05-4	<1.0

Others :

4. FIRST-AID MEASURES

- If inhaled : • If victim feel unwell with inhaling vapours, gas, etc. ; Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if you/victim feel unwell.
- If on skin : • Wipe adherent material immediately with clothing.
• Wash and scrub skin thoroughly with plenty of soap and water, or skin soap. Do not use solvent or thinner for washing.
• If skin color changed, or irritation or pain occurs: Get immediate medical advice if you/victim feel unwell.
• Remove/Take off immediately all contaminated clothing.
- If in eyes : • Get medical advice as soon as possible.
• Wash immediately with plenty of running clean water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Also wash eyelids thoroughly .
• Immediately call a doctor.
- If swallowed : • If swallowed; Get immediate medical advice.
• Do not allow victims to swallow vomiting thing.
• Do not induce vomiting without a doctor advice.

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : • Carbon dioxide, a bubble, powder.
- Banned extinguishing media : • Water (stick water, high pressure water).
- "Special fire-fighting procedures, protection of fire-fighters" : • Wear an appropriate protective equipment (cool insulating clothing and so forth).
• Eliminate all flammable sources immediately from surrounding area.
• Use specified extinguishing agents for extinction.
• Cool heated closed containers with water.
• Fight fire from upwind position.

6. ACCIDENTAL RELEASE MEASURES

- "Personal precautions, protective equipment and emergency procedures" : • Wear an appropriate protective equipment (protective gloves/protective mask/face protection/protective clothing/eye protection and so forth), when using this material.
• Isolate area, keep unauthorized personnel away for prevention of second accident.

- Eliminate ignition sources, hot surfaces and flammable sources immediately from surrounding area.
 - Stand by with an appropriate fire extinguishers ready against ignition.
 - Pay attention to avoid a environment pollution due to spill into river and so on.
- Environmental precautions
:
- Collect leaks into a closed container. Transfer it to a safe place.
 - Handle adherent material or waste material, etc. under related laws and regulations.
 - Collect this material with using equipments made from non-sparking tools against shock or static discharge.
 - Absorb with earth, sand or other non-combustible material. Bank with earth to avoid spilling if large spill.
- Methods and materials for containment and cleaning up :

7. HANDLING AND STORAGE

Handling :

Technical measures :

- Handle only in a well-ventilated area.
- Keep container tightly closed each time.
- Do not use or handle heat, sparks, hot surfaces.
- Wear an antistatic working wear and shoes, when using this material.
- Use only non-sparking tools.
- Wear a protective equipment avoid getting on skin, on mucosa irritation, on clothing, or in eyes.
- Wash hand and face thoroughly after handling. Do not bring to Contaminated protective equipment such as gloves, etc. should not bring it to resting place (should not be allowed out of the workplace).
- Wash hand and face etc. thoroughly after handling. Do not bring to Contaminated protective equipment such as gloves should not bring it to resting place (should not be allowed out of the workplace).

Precautions for safe handling :

- Ground equipment and use explosion-proof electrical equipment against static discharge.

Storage :

Technical measures :

- Protect from sunlight.
- Store in a well-ventilated place.
- Store away from fire or heat.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls :

- Use only explosion-proof electrical equipment.
- Use air ventilating system avoid staying steam.
- All equipment for liquid to transport, draw, beat, etc. must be bonded.
- Keep away from hot surfaces and ignition source in a workspace.
- In cases of painting work in a indoor workshops, install equipment which worker does not been exposed such as an automatic painting system etc., or install equipment to avoid exposing with a local exhaust ventilation system.
- In cases of work in closed space such as inside of a tank, etc. Install a general ventilation system to ventilate inside air from bottom of tank.
- Make an equipment of corrosive resistant material.
- Pay attention to workspace not to contact directly or not to expose corrosion materials.

Industrial Safety and Health Law Administrative control level :

A chemical substance name	Administrative control level
Toluene	50 ppm
Ethyl acetate	200 ppm

Occupational exposure limit (ACGIH) :

A chemical substance name	T W A	STEL	Ceiling	Skin	Year

Toluene	—	—	50 ppm	○	
	—	—	180 mg/m ³	○	
Ethyl acetate	—	—	400 ppm		
	—	—	1440 mg/m ³		
Vinyl acetate	—	—	10 ppm		
	—	—	35 mg/m ³		

Carcinogenicity (IARC) :

A chemical substance name	
Toluene	3
Vinyl acetate	2B

Personal protective equipment :

- Respiratory protection : • Wear an appropriate respiratory protection for toxic materials.
- Hand protection : • Wear a protective gloves made from material that doesn't infiltrate an organic solvent or a chemical.
- Eye protection : • Wear an eye protection when using this material.
- Skin and body protection : • Wear a protective clothes to avoid contacting with skin directly when this material is handled. It is preferable that protective clothes made from material that doesn't infiltrate a chemical.
- Others : • Wear an electricity conducting shoes, in cases of electrostatic painting.

9. PHYSICAL AND CHEMICAL PROPERTIES

The appearance :

"Physical state, shape, colour, etc" :	Liquid	
Shape :	Viscous liquid	
A color :	Colorless	
Odour :	Solvent odor	
pH :	No information.	
Initial boiling point and boiling range :	Toluene	111 °C
	Ethyl acetate	77 °C
	Vinyl acetate	72 °C
Flash point :	-4 °C	
Auto-ignition temperature :	Toluene	480 °C
	Ethyl acetate	427 °C
Upper/lower flammability or explosive limits :	Toluene	7.1 vol %/1.1 vol %
	Ethyl acetate	11.5 vol %/2.2 vol %
	Vinyl acetate	13.4 vol %/2.6 vol %
Vapor pressure :	Toluene	2933 Pa(20 °C)
	Ethyl acetate	12452 Pa(25 °C)
	Vinyl acetate	11066 Pa(20 °C)
Vapour density :	No information.	
Relative density :	0.95(25°C)	
Solubility :		
The solubility for the water :	No information.	
A dissolubility for the water :	insoluble	
The solubility for the solvent :	No information.	
A dissolubility for the solvent :	Organic solvent Fusibility	
Partition coefficient: n-octanol/water :	Toluene	2.73
	Vinyl acetate	0.73

Decomposition temperature No pertinence.
 :
 Others : No information.

1 0 . STABILITY AND REACTIVITY :

Stability /possibility of hazardous reactions : • Viscosity may increase under high temperatures.
 Conditions to avoid : • Heat, sparks, open flames
 Incompatible materials : • No information
 Hazardous decomposition products : • Carbon oxide on burning.
 Others : • Not available

1 1 . TOXICOLOGICAL INFORMATION

Acute toxicity :	Toluene	LD50 (oral)	4800 mg/kg
		"LD50 (I pass, skin)"	12000 mg/kg
		LC50 (steam)	4800 ppm(4H)
	Ethyl acetate	LD50 (oral)	>5000 mg/kg
		LC50 (steam)	14620 ppm(4H)
	Vinyl acetate	LD50 (oral)	2900 mg/kg
"LD50 (I pass, skin)"		2335 mg/kg	
LC50 (steam)		3184 ppm(4H)	
skin corrosion/irritation ; serious eye damage/ irritation :	Toluene	Category 2	
	Toluene	Category 2B	
	Ethyl acetate	Category 2B	
	Vinyl acetate	Category 2A	
Sensitization-skin :	Vinyl acetate	Category 1	
Germ cell mutagenicity :	Vinyl acetate	Category 2	
Carcinogenicity :	Vinyl acetate	Category 2	
Reproductive toxicity :	Toluene	Category 1A	
Specific target organ toxicity-single exposure :	Toluene	Category 1	(central nervous system)
		Category 3	(airway irritation, anesthetic action)
	Ethyl acetate	Category 1	(respiratory apparatus)
		Category 3	(anesthetic action)
	Vinyl acetate	Category 3	(airway irritation)
		Category 1	(liver, kidney, central nervous system)
Specific target organ toxicity ? repeated exposure :	Toluene	Category 1	(liver, kidney, central nervous system)
	Vinyl acetate	Category 2	(respiratory apparatus)
Aspiration hazard :	Toluene	Category 1	

1 2 . ECOLOGICAL INFORMATION :

- Spilled material or waste material may cause environmental damage; Handle carefully. Do not throw washing water and product on ground, into river and into waterways directly.

Hazardous to the aquatic
environment :

Toluene	3.5 mg/L
Ethyl acetate	164 mg/L
Vinyl acetate	2.39 mg/L

Hazardous to the aquatic
environment - acute hazard ;

- Toluene Category 2
- Vinyl acetate Category 2

1 3 . DISPOSAL CONSIDERATIONS

- Residual waste :
- Contract with Industrial Waste Disposal Operators who has obtained a license, and entrust such handling and disposal waste material of paints, container, etc..
 - Do not throw washing water etc. using for washing container or equipment on ground and into waterways.
 - Handle and dispose waste material made of dewatering, incinerating, etc. with following the Waste Disposal and Public Cleansing Law or related laws and regulations, or entrust such handling or disposal.
 - Absorb paints waste with things such diatom earth, and incinerate absorbed waste in an opened incinerators little by little, in cases where paints waste is incinerated. Or incinerate sprayed paints which is sprayed into firebox of an incinerators. Contract with Industrial Waste Disposal Operators who has obtained a license, and entrust such incineration, in cases where toxic or harmful substances gas such dioxin may be generated .
- Contaminated container and packaging :
- Handle and dispose an empty container after contents in container are removed completely.
 - Contract with an industrial waste disposal contractor who obtains permission, and entrust such handling and disposal of waste material.
-

1 4 . TRANSPORT INFORMATION :

- Make sure of any leaks from the container. Take it without falling down, rolling down and damage when loading. Avoid loading collapse.
- Follow a description of "handle and store notice section"

- Class :
- 3
- UN number :
- 1263
- Packing Group :
- III
- Land transportation :
- Follow transportation method in correspond with each law, if corresponding to the fire service, the Ordinance on Prevention of Organic Solvent Poisoning, or the Poisonous and Deleterious Substances Control Law.
- Marine transport :
- Follow in accordance with the Ship Safety Act.
- Air transport :
- Follow in accordance with the Civil Aeronautics Act.
- ERG guide number :
- 128
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1 5 . REGULATORY INFORMATION :

- Others :
- Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.
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1 6 . OTHER INFORMATION

The reference of mention contents :

Company name : Harima Chemicals, Inc.

The information herein is given in good faith, but no warranty, express or implied, is made. Please consult the HARDMA CHEMICALS, INC. for further information.