



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 22-Feb-2024 Revision Number 3.05

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Butyl Acrylate
Product Code	022-03306,020-03302
Supplier	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-2029
Emergency telephone number Recommended uses	+81-6-6203-3741 / +81-3-3270-8571 For research use only
Restrictions on use	Seek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification <u>Classification of the substance or mixture</u> Flammable liquids Acute toxicity - Dermal Acute toxicity - Inhalation (Vapors) Skin corrosion/irritation Serious eye damage/eye irritation Skin sensitization Specific target organ toxicity (single exposure) Category 1 respiratory system Specific target organ toxicity (repeated exposure) Category 1 respiratory system Acute aquatic toxicity

Category 3 Category 4 Category 3 Category 2 Category 2 Category 1 Category 1

Category 2

Pictograms



Hazard statements

- H226 Flammable liquid and vapour
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H312 Harmful in contact with skin
- H331 Toxic if inhaled
- H317 May cause an allergic skin reaction
- H401 Toxic to aquatic life
- H370 Causes damage to the following organs: respiratory system
- H372 Causes damage to the following organs through prolonged or repeated exposure: respiratory system

Precautionary statements-(Prevention)

• Wear protective gloves/protective clothing/eye protection/face protection

- Wash face, hands and any exposed skin thoroughly after handling
- · Contaminated work clothing should not be allowed out of the workplace
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- Avoid release to the environment
- · Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ ventilating / lighting / equipment
- · Use only non-sparking tools
- Take precautionary measures against static discharge
- Keep cool

Precautionary statements-(Response)

- · IF exposed: Call a POISON CENTER or doctor/physician
- 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
- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation or rash occurs: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician
- In case of fire: Use suitable extinguishing media for extinction

Precautionary statements-(Storage)

- Store in a well-ventilated place. Keep container tightly closed
- · Store locked up

Precautionary statements-(Disposal)

· Dispose of contents/container to an approved waste disposal plant

Others Other hazards

Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula

CH2:CHCOO(CH2)3CH3

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Butyl Acrylate	98.0	128.17	(2)-989	*	141-32-2
Note on ISHL No.:	* in the table means announced chemical substances.				

Impurities and/or Additives:

[Stabilizer]p-Methoxyphenol about 0.01 %

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Vapors may form explosive mixtures with air

Special extinguishing method

No information available

Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminent and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions	
Storage conditions	Keep container protect from light, store
	in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.
Safe packaging material	Glass
Incompatible substances	Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Butyl Acrylate	N/A	N/A	TWA: 2 ppm
141-32-2			

Personal protective equipment Respiratory protection

Hand protection Eye protection gas mask for organic gas (JIS T 8152) chemical protective gloves (JIS T 8116) protective eyeglasses or chemical safety goggles (JIS T 8147) Long-sleeved work clothes

Skin and body protection General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

Form	
Color	colorless
Turbidity	clear
Appearance	liquid
Odor	unpleasar
Melting point/freezing point	-64.6 °C
Boiling point, initial boiling point and boiling range	145 °C
Flammability	Flammabl
Evaporation rate:	no data av
Flammability (solid, gas):	no data av
Upper/lower flammability or explosive limits	
Upper:	10 %
Lower:	1.5 %
Flash point	38 °C
Auto-ignition temperature:	no data av
Decomposition temperature:	no data av
рН	no data av
Viscosity (coefficient of viscosity)	no data av
Dynamic viscosity	no data av
Solubilities	water : slig
n-Octanol/water partition coefficient:(log Pow)	no data av
Vapour pressure	no data av
Specific Gravity / Relative density	0.895-0.90
Vapour density	4.45
Particle characteristics	no data av

asant °C °C mable liquid and vapor ta available ta available С ta available ta available ta available ta available ta available : slightly soluble . ta available ta available -0.903g/mL ta available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity Chemical stability Hazardous reactions None under normal processing Conditions to avoid no data available May be altered by light.

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark Incompatible materials Strong oxidizing agents Hazardous decomposition products Carbon monooxide (CO), Carbon dioxide (CO2)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity			
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Butyl Acrylate	9050 mg/kg (Rat)	1700 mg/kg (Rat), 2000 mg/kg(Rabbit)	2199 ppm (Rat)4 h
Chemical Name	Acute toxicity -oral- sourc	e Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Butyl Acrylate	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS

	classification results.	classification results.	classification results.
Chemical Name			Acute toxicity -inhalation mist-
	vapor- source information	source information	source information
Butyl Acrylate	Based on the NITE GHS	Based on the NITE GHS	Based on the NITE GHS
	classification results.	classification results.	classification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information	
Butyl Acrylate	Based on the NITE GHS classification results.	
Serious eye damage/ irritation		
Chemical Name	Serious eye damage/irritation source information	
Butyl Acrylate	Based on the NITE GHS classification results.	
Respiratory or skin sensitization		
Chemical Name	Respiratory or Skin sensitization source information	
Butyl Acrylate	Based on the NITE GHS classification results.	
Reproductive cell mutagenicity		
Chemical Name	germ cell mutagencity source information	
Butyl Acrylate	Based on the NITE GHS classification results.	
Carcinogenicity		
Chemical Name	Carcinogenicity source information	
Butyl Acrylate	Based on the NITE GHS classification results.	

Chemical Name	NTP	IARC	ACGIH	JSOH (Japan)
Butyl Acrylate	-	Group 3	-	-
141-32-2				
Reproductive toxicity				
Chemical Name		Reproductive toxicity source information		
Butyl Acrylate	I	Based on the NITE GH	S classification res	ults.
STOT-single exposure				
Chemical Name		STOT -single exposure- source information		
Butyl Acrylate		Based on the NITE GHS classification results.		
STOT-repeated exposure				
Chemical Name		STOT -repeate	ed exposure- sour	ce information
Butyl Acrylate		Based on the NITE GHS classification results.		
Aspiration hazard				
Chemical Name		Aspiratio	n Hazard source in	formation
Butyl Acrylate		Based on the NITE GHS classification results.		ults.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Butyl Acrylate	EC50:Pseudokirchneriella	LC50: Killifish	EC50:Daphnia magna
	subcapitata 5.5 mg/L 96 h	2420ug/L 96 h	42 mg/L 24 h EC50:Daphnia magna
			8.2 mg/L 48 h

Other data

Chemical Name	Short-term (acute) hazardous to the Long-term (chronic) hazardou	
	aquatic environment source information	aquatic environment source information
Butyl Acrylate	Based on the NITE GHS classification	Based on the NITE GHS classification
	results.	results.

Persistence and degradability
Bioaccumulative potential
Mobility in soil
Hazard to the ozone layer

No information available No information available No information available No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations. **Contaminated container and contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number	UN2348
Proper shipping name:	Butyl acrylates, stabilized
UN classfication	3
Subsidiary hazard class	
Packing group	III
Marine pollutant	Not applicable
IMDG	
UN number	UN2348
Proper shipping name:	Butyl acrylates, stabilized
UN classfication	3
Subsidiary hazard class	
Packing group	111
Marine pollutant (Sea)	Not applicable
Transport in bulk according to	No information available
Annex II of MARPOL 73/78 and	
the IBC Code	
IATA	
UN number	UN2348
Proper shipping name:	Butyl acrylates, stabilized
UN classfication	3
Subsidiary hazard class	
Packing group	111
Environmentally Hazardous	Not applicable
Substance	

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act Poisonous and Deleterious Substances Control Law	Category IV, Class II petroleums, dangerous grade 3 Not applicable
Industrial Safety and Health Ac	t Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)
	Notifiable Substances (Law Art.57-2)
	Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4)
Industrial Safety and Health Act (2024~)	[2024.4.1~] Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)
Regulations for the carriage and storage of dangerous	Flammable Liquids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
goods in ship	
Civil Aeronautics Law	Flammable Liquids (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc., Attached Table 1)
Marine Pollution Prevention Law	Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y
Pollutant Release and Transfer	r Class 1
Register Law (2023.4.1-)	
Class 1 - No.	7
Export Trade Control Order	Not applicable

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
Butyl Acrylate 141-32-2(98.0)	-	Applicable	Applicable

Section 16: OTHER INFORMATION

Key literature references and NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html sources for data etc. IATA dangerous Goods Regulations RTECS: Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc

Record of SDS revisions The following contents were revised. Regulatory information.

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z 7252:2019. *JIS: Japanese Industrial Standards

End of Safety Data Sheet