



1. identification

1.1. Product identifier

Substance name : 2-Ethylhexyl acrylate [2EHAB]

EC No. : 203-080-7

REACH Registration No. :

CAS No. : 103-11-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

- Monomer of plastic products, Protective coating, Paper treatments, Production of water-soluble paint, Coating materials, Adhesives, Printing inks, Cross-linking agent

1.2.2. Uses advised against

- Not available

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier : GODO CHEMICAL Corporation

Address : #1017, 10F Suseo Hyundai Ventureville 10 Bamgogae-ro 1-gil Gangnam-gu Seoul
06349 Korea

Telephone : (82)2 417 2555~6

Email : godochem@godochem.com

1.4. Emergency telephone number

EU-wide emergency number : 112

See section 16.6 for the list of telephone number of National Helpdesks in the European Economic Area

2. hazard identification

2.1. Classification of the substance/mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP]

- Skin corrosion/irritation : Category2, H315
- Skin sensitization : Category1, H317
- Specific target organ toxicity(Single exposure) : Category3(Respiratory tract irritation), H335

2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]

- * Hazard Pictogram(s)



* Signal word : Warning

* Hazard statement(s)

- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H335 May cause respiratory irritation.

* Precautionary statement(s)

1) Prevention

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2) Response

- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P321 Specific treatment
- P332+P313 If skin irritation occurs: Get medical advice/attention.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P363 Wash contaminated clothing before reuse.

3) Storage

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

4) Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulation

2.3. Other hazards

- Not available



3. composition/information on ingredients

Name	CAS No.	REACH registration No.	% [weight]	Classification [1272/2008/EC]
2-Ethylhexyl acrylate	103-11-7	-	99.5	Aquatic Acute 2, H401 STOT SE 3, H335 Skin Sens. 1, H317 Skin Irrit. 2, H315

4. first aid measures

4.1. Description of first aid measures

General

- No general information.

Inhalation

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.
- Get medical attention immediately

Skin contact

- Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Wash contaminated clothing thoroughly before re-using.
- Get medical attention immediately.
- Go to the hospital immediately if symptoms(flare, irritate) occur.
- Wash thoroughly after handling.

Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.
- Get medical attention immediately.

Ingestion

- Please be advised by doctor whether induction of vomit is demanded or not
- Rinse your mouth with water immediately.
- Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

- Not available

4.3. Indication of any immediate medical attention and special treatment needed

- Notify medical personnel of contaminated situations and have them take appropriate protective measures



5. fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media

- Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

Unsuitable extinguishing media

- Avoid use of water jet for extinguishing

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

- Not available

5.3. Advice for firefighters

- Cool containers with water until well after fire is out.
- Keep unauthorized personnel out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Keep containers cool with water spray.
- Use fire fighting procedures suitable for surrounding area.
- Vapor or gas is burned at distant ignition sources can be spread quickly.

6. additional release measures

6.1. Personal Precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment: Wear proper protective equipment.
- Emergency procedures: Not applicable
- If required, notify relevant authorities according to all applicable regulations.

6.1.2. For emergency responders

- Ventilate closed spaces before entering.
- Move container to safe area from the leak area.
- Remove all sources of ignition.
- Handle the damaged containers or spilled material after wearing appropriate protective equipment
- Do not direct water at spill or source of leak.
- Avoid skin contact and inhalation

6.2. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.
- If large amounts have been spilled, inform the relevant authorities.
- Avoid dispersal of spilt material and runoff and contact with waterways, drains and sewers. If large spills, advise emergency services.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

- Don't use a brush or compressed air for cleaning surfaces or clothing.

- Clean up all spills immediately.
- Prevent, by any means available, spillage from entering drains or water course.
- Stop leak if safe to do so.

6.3.2. For cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation
- Appropriate container for disposal of spilled material collected.

7. handling and storage

7.1. Precautions for safe handling

- Comply with all applicable laws and regulations for handling
- Do not handle until all safety precautions have been read and understood.
- Operators should wear antistatic footwear and clothing.
- Do not inhale the steam prolonged or repeated.
- Avoid direct physical contact.

7.2. Conditions for safe storage, including any incompatibilities

- Check regularly for leaks.
- Do not use damaged containers.
- Do not apply direct heat.
- Store according to current laws and regulations
- Collected them in sealed containers.

7.3. Specific end use(s)

- See Section 1 for information on 1.2 Relevant identified uses.

8. exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limits

European Union (EU) Commission Directive 2006/15/EC (IOELVs)

- Not available

European Union (EU) Commission Directive 2006/15/EC (IOELVs) – Skin

- Not available

8.1.2. Recommended Monitoring Procedures

- Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8.1.3. DNEL/PNEC – Values

- Not available

8.2. Exposure controls



8.2.1. Appropriate engineering controls

– Business owner is recommended to maintain below recommended exposure limits for the working place with general exhaust of gas/vapour/mist/fume.

8.2.2. Individual protection measures, such as personal protective equipment

Hand protection

– Wear appropriate glove.

Eye protection

– Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.

– Provide an emergency eye wash station and quick drench shower in the immediate work area.

Respiratory Protection

– Respiratory protection is ranked in order from minimum to maximum.

– Consider warning properties before use.

– Any chemical cartridge respirator with organic vapor cartridge(s).

– Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).

– Any air-purifying respirator with a full facepiece and an organic vapor canister.

– For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.

– Under conditions of frequent use or heavy exposure, Respiratory protection may be needed

Skin protection

– Wear appropriate clothing.

Others

– It is necessary to wear protective clothes and other protection equipment. Cover your face, head and neck

– Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood.

– Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely

Thermal hazards

– Not available

8.2.3 Environmental exposure controls

– Do not let product enter drains. For ecological information refer to section 12

9. physical and chemical properties

Appearance(State)	Liquid
Appearance(Color)	Colourless
Odor	Pleasant odor
Odor threshold	0.03 ppm (0.02 mg/l(TOMES;HSDB))
pH	Not available
Melting point/Freezing point	-90 °C
Initial boiling point and boiling range	215 °C
Flash point	86 °C
Evaporation rate	Not available
Flammability(solid, gas)	Not available
Upper/Lower Flammability or explosive limits	Not available
Vapour pressure	0.24 hPa 25 °C
Vapour density	6.35
Relative density	0.88 at 20 °C
Solubility	9.6 mg/L at 25 °C
Partition coefficient of n-octanol/water	ca. 4 at 25 °C
Autoignition temperature	252 °C
Decomposition temperature	Not available
Viscosity	1.75 mPa s at 20 °C
Explosive properties	Not available
Oxidising properties	Not available

9.2. Other information

- Not available

10. stability and reactivity

10.1. Reactivity

- Not available

10.2. Chemical Stability

- This material is stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

- Hazardous Polymerization will not occur

10.4. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

10.5. Incompatible materials

- Not available

10.6. Hazardous decomposition products

- May emit flammable vapour if involved in fire

11. toxicological information

11.1. Acute toxicity

- Oral
- Product (ATEmix) : 2000mg/kg < ATEmix <= 5000mg/kg
- [2-Ethylhexyl acrylate] : LD50 ca. 4435 mg/kg Rat (OECD Guideline 401)

2EHA



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- Dermal
 - Product (ATEmix) : >5000mg/kg
 - [2-Ethylhexyl acrylate] : LD50 ca. 7522 mg/kg Rabbit
- Inhalation
 - Product (ATEmix) : Not available
 - [2-Ethylhexyl acrylate] : LC50 >1.19 mg/L air 8hr Rat (OECD Guideline 403)
- 11.2. Skin corrosion/irritation
 - Causes skin irritation
- 11.3. Serious eye damage/irritation
 - Not available
- 11.4. Respiratory sensitization
 - Not available
- 11.5. Skin sensitization
 - May cause an allergic skin reaction
- 11.6. Germ cell mutagenicity
 - Not available
- 11.7. Carcinogenicity
 - IARC
 - [2-Ethylhexyl acrylate] : Group 3
 - OSHA
 - Not available
 - ACGIH
 - Not available
 - NTP
 - Not available
 - EU CLP
 - Not available
- 11.8. Reproductive toxicity
 - Not available
- 11.9. Specific target organ toxicity(single exposure):
 - May cause respiratory irritation.
- 11.10. Specific target organ toxicity(repeated exposure):
 - Not available
- 11.11. Aspiration hazard
 - Not available

12. ecological information

- 12.1. Toxicity
 - 12.1.1. Fish
 - [2-Ethylhexyl acrylate] : LC50 1.81 mg/L 96hr *Oncorhynchus mykiss* (OECD TG 203)
 - 12.1.2. Invertebrate
 - [2-Ethylhexyl acrylate] : EC50 1.3 mg/L 48hr *Daphnia magna* (OECD TG 202), 48d-NOEC (reproduction) 0.136 mg/L *Daphnia magna* (OECD TG 211)

- 12.1.3. Algae
- [2-Ethylhexyl acrylate] : EC50 1.71 mg/L 72hr *Desmodesmus subspicatus* (OECD TG 201), 72hr-NOEC 0.45 mg/l *Scenedesmus subspicatus*
- 12.2. Persistence and degradability
- 12.2.1. Persistence
- [2-Ethylhexyl acrylate] : Log Kow 4
- 12.2.2. Degradability
- [2-Ethylhexyl acrylate] : 80% in 28 days. readily biodegradable (ECHA)
- 12.3. Bioaccumulative potential
- 12.3.1. Bioaccumulation
- [2-Ethylhexyl acrylate] : BCF 270~282.4
- 12.3.2. Biodegradability
- [2-Ethylhexyl acrylate] : Readily biodegradable
- 12.4. Mobility in soil
- Not available
- 12.5. Results of PBT and vPvB assessment
- Not available
- 12.6. Other adverse effects
- Not available

13. disposal considerations

- 13.1. Waste treatment methods
- Since more than two kinds of designated waste is mixed, it is difficult to treat separately, then can be reduction or stabilization by incineration or similar process.
 - If water separation is possible, pre-process with Water separation process.
 - Dispose by incineration.
- The user of this product must dispose by oneself or entrust it to a waste disposer, a person who recycles other's waste or establishes and operates waste disposal facilities.
- Dispose of waste in accordance with all applicable laws and regulations.

14. transport information

- 14.1. UN No.
- 14.1.1. UN No. (ADR/RID/ADN)
- Not applicable
- 14.1.2. UN No. (IMDG)
- Not applicable
- 14.1.3. UN No. (ICAO)
- Not applicable
- 14.2. UN proper shipping name
- Not applicable



14.3. Transport hazard class(es)

14.3.1. ADR/RID/ADN Class

– Not applicable

14.3.2. ADR/RID/ADN Class

– Not available

14.3.3. ADR Label No.

– Not applicable

14.3.4. IMDG Class

– Not applicable

14.3.5. ICAO Class/Division

– Not applicable

14.4. Packing group

14.4.1. ADR/RID/ADN Packing group

– Not applicable

14.4.2. IMDG Packing group

– Not applicable

14.4.3. ICAO Packing group

– Not available

14.5. Environmental hazards

– Not available

– Not applicable

14.6. Special precautions for user

– Local transport follows in accordance with Dangerous goods Safety Management Law.

– Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

. DOT 49CF : 172.101

. Acceptable Cargo Name : Flammable Liquid, 2-Ethylhexyl Acrylate

. ID Number : NA1993

. Hazard Rating or Grade : Flammable Liquid

. Packing Grade : III

. Request to Attach a Warning Sign : Not Applicable– Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

. Transport In Bulk according to Annex I or II of MARPOL 73/38 and the IGC Code : Consult IMO Regulations before transporting ocean bulk

– EmS FIRE SCHEDULE : F-A (General fire schedule)

– EmS SPILLAGE SCHEDULE : S-F (Water-soluble marine pollutants)

– Self Accelerating Polymerization Temperature (SAPT) : 80

– heat reaction in J/g : approx. 232KJ/kg

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

– Not applicable



15. regulatory information

15.1. Safety, health and environmental regulation / legislation specific for the substance or mixture

15.1.1. Europe regulatory

15.1.1.1 REACH Restricted substance under REACH

– Not applicable

15.1.1.2 REACH Substances subject to authorization under REACH

– Not applicable

15.1.1.3 REACH SVHC

– Not applicable

15.1.1.5 European Union (EU) Transport of Dangerous Goods by Road – Dangerous Goods List

– Not applicable

15.2. Chemical Safety Assessment

– Not conducted

16. other information

16.1. Indication of changes

– The Safety Data Sheet has been reviewed and the data therein were revised and laid out according to the requirements of the Commission Regulation (EC) No. 1907/2006

16.2. Abbreviations and acronyms

– 1272/2008 CLP : Classification, Labelling and Packaging regulation.

– REACH : Registration, Evaluation and authorisation of chemical substances.

– DNEL : Derive no effects level

– PNEC : Predicted no effect concentration

16.3. Key literature references and sources for data

– This Safety Data Sheet was compiled with data and information from the following sources: RTECS, ECOSAR, HSDB, SIDS SIAP, ChemWATCH, CESAR, Chemical DB

16.4. Classification procedure

– The mixture classification has been derived based on the classification of the individual components in accordance with the rules set out in Regulation (EC) No 1272/2008 (CLP) as well as the translation tables in Annex VII to the same regulation.

16.5. Training advice

– Not applicable

16.6. Further information

– The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment.

Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

– This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only.

– It should not therefore be construed as guaranteeing any specific property of the product.