SDS Report

Sample Description	2-ETHYLHEXYL ACRYLATE
Applicant	DEXI CHEMICALS CO.,LIMITED

Safety Data Sheet（SDS）

according to ISO11014 & ST/SG/AC.10/30/Rev.4(GHS)

2-ETHYLHEXYL ACRYLATE

Section 1 - Chemical Product and Company Identification

Sample Name: 2-ETHYLHEXYL ACRYLATE
Recommended uses: N/A
Restrictions on use: N/A
Company Identification: DEXI CHEMICALS CO.,LIMITED
Address: RM 1902 EASEY COMM BLDG 253-261 HENNESSY RD WANCHAI HONG KONG

E-mail: helen@gpcchem.com **Post Code:**

24-hour Emergency Tel: +86 371 89916809
Manufacturer Name: DEXI CHEMICALS CO.,LIMITED

Section 2 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.
UN Hazard Class: None.

GHS Classification:

Physical Hazards	Classification	Health and Environmental Hazards	Classification
Explosives	None	Acute toxicity	ND.
Flammable gases	NA.	Skin corrosion/irritation	2
Flammable aerosols	NA.	Serious eye damage/eye irritation	ND.
Oxidizing gases	NA.	Respiratory sensitization	ND.
Gases under pressure	NA.	Skin sensitization	1
Flammable liquids	None	Germ cell mutagenicity	ND.
Flammable solids	NA.	Carcinogenicity	ND.
Self-reactive substances and mixture	None	Toxic to reproduction	ND.

Pyrophoric liquids	None	Target organ systemic toxicity (Single exposure)	3
Pyrophoric solids	NA.	Target organ systemic toxicity (Repeated exposure)	ND.
Self-heating substances	None	Aquatic toxicity (Acute)	ND.
Substances and mixture, which in contact with water, emit flammable gases	None	Aquatic toxicity (Chronic)	ND.
Oxidizing liquids	None	Effects on or via Lactation	ND
Oxidizing solids	NA.	Hazardous to the atmospheric environment	ND
Organic peroxides	None	Aspiration Hazard	ND
Corrosive to metals	None		

GHS label elements:

Classification	the assigned pictogram	signal word	hazard statement code
Skin Irrit. 2		Warning	H315: Causes skin irritation.
Skin Sens. 1		Warning	H317: May cause an allergic skin reaction.
STOT SE 3		Warning	H335: May cause respiratory irritation.

Precautionary statements code:

P264: Wash thoroughly after handling ...

P261: Avoid breathing dust / smoke / mist / vapors / spray.

P271: only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be out of the workplace.

P280: Wear protective gloves / protective clothing / wear protective goggles / face protection.

P302+P352：If on skin: wash with plenty of water/...

P304+P340：if inhaled: remove person to fresh air and keep comfortable for breathing.

P312: Call a poison Center/doctor/.../if you feel unwell

P321：Specific treatment(see...on this label).

P332+P313：If skin irritation occurs: Get medical advice/attention

P333+P313：If skin irritation or rash occur: Get medical advice/attention

P362+P364: Take off contaminated clothing and wash it before reuse.

P403+P233：Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501：Dispose of contents / container ... (in accordance with local / regional / national / international regulations (to be specified))

Section 3 - Composition, Information on Ingredients

General Chemical Description: This chemical product is a substance.

Chemical Name	CAS No.	Percent (by weight)	EC#	Hazard Statement code
2-ETHYLHEXYL ACRYLATE	103-11-7	⩾99.5%	203-080-7	H315; H317; H335
Water	7732-18-5	⩽0.1%	231-791-2	N/A
Phenol, 4-methoxy-	150-76-5	（10-20）ppm	205-769-8	N/A
Free acid (as Acrylic acid)	79-10-7	⩽0.01%	201-177-9	N/A

Molecular Formula: $C_{11}H_{20}O_2$.

Molecular Weight: 184.3

Synonymous Name: 2-ethylhexyl acrylate; 2-ethylhexyl propenoate; 2-propenoic acid 2-ethylhexyl ester; 2-propenoic acid octyl ester

Section 4 - First Aid Measures

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that vapor/mist are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if easily possible. Get medical aid if symptoms occur.

Skin: Wipe off excess material from skin and then immediately flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical aid if symptoms occur.

Inhalation: Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical aid if cough or other symptoms appear.

Ingestion: DO NOT induce vomiting. If conscious and alert, rinse mouth and drink plenty of water or milk. Keep person warm and at rest. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5 - Fire Fighting Measures

Extinguishing Media: AFFF, foam, powder, carbon dioxide, water spray. Use water spray to keep fire-exposed containers cool.

General Information: Flash Point is 79℃ (Open cup) . Combustible liquid. Will be easily ignited by heat or flames. Above 79℃, vapors may form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards. Vapors are heavier than air. Risk of fire and explosion on contact with incompatible materials. May polymerize explosively when heated or involved in a fire. The product decomposes on heating and on burning producing toxic and irritant fumes including oxides of carbon, hydrocarbons and etc. Containers may explode in the heat of a fire.

Specific Extinguishing Methods: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Move containers from fire area if this can be done without risk. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. Prevent run off from fire control dilution from entering streams or drinking water supply.

Protective Equipment: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Section 6 - Accidental Release Measures

Person-related Safety Precautions: No action shall be taken involving any personal risk or without suitable training. Evacuate and ventilate spill area. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Prevent generation of mists! Avoid breathing vapor and fume. Review Section 5 and Section 7 sections before proceeding with clean-up. Use proper personal protective equipment as indicated in Section 8.

Measures for Environmental Protection: Avoid dispersal of spilled material and runoff and contact with soil, water ways, drains and sewers, basements or confined areas. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Measures for Cleaning/Collecting: Remove all sources of ignition. Stop leak if safe to do so. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in sealable labelled appropriate container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product.

Section 7 - Handling and Storage

General Information: This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Promptly remove any clothing that becomes contaminated. Isolate contaminated clothing and wash before reuse. DO NOT take working clothes home.

Storage: NO open flames. Above 79℃ use a closed system, ventilation,

explosion-proof electrical (ventilating, lighting and material handling) equipment. Do not enter storage areas and confined spaces unless adequately ventilated. Store in an original container or an approved alternative made from a compatible material. Keep container tightly closed and sealed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store only if stabilized. Keep in the dark. Store in a cool, dry, well-ventilated area away from incompatible substances (see section 10), any sources of ignition or heat (e.g. open flames, smoking, hot surfaces), food, drink and feedstuffs. Inspect regularly for deficiencies such as damage or leaks. Treat carefully, avoid physical damage to containers. The storage area should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment. Use appropriate containment to avoid environmental contamination.

Handling: Training should be provided to anyone working with or near this material. Training should cover potential health effects and proper handling techniques. NO open flames. Above 79℃ use a closed system, ventilation, explosion-proof electrical (ventilating, lighting and material handling) equipment. Vapours will be uninhibited and may polymerize in exhaust or ventilation facilities with risk of breakdown. Ensure good local exhaust ventilation. Handle and open container with care. Keep container tightly closed and away from incompatible substances (see section 10), any sources of ignition or heat (e.g. open flames, smoking, hot surfaces), food, drink and feedstuffs. Avoid all unnecessary exposure. Avoid contact with eyes, skin and clothing. Avoid ingestion and inhalation. Remove contaminated clothing and shoes. Wash clothing and shoes thoroughly before reuse. Empty containers retain product residue (Liquid or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. The work area should be equipped with the corresponding species and quantity of fire equipment and leakage emergency equipment. Use appropriate containment to avoid environmental contamination.

Section 8 - Exposure Controls, Personal Protection

Exposure Limit: No data available.

Monitoring Methods: No information found.

Engineering Controls: NO open flames. Above 79℃ use a closed system, ventilation, explosion-proof electrical (ventilating, lighting and material handling) equipment. Vapours will be uninhibited and may polymerize in exhaust or ventilation facilities with risk of breakdown. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The engineering controls also need to keep gas or vapor concentrations below any lower explosive limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment:

- **Eyes: Use safety goggles or eye protection in combination with breathing protection.**
- **Skin and Clothing: Wear appropriate protective clothing and gloves.**
- **Respirators: An appropriate respirator or mask should be used whenever workplace conditions warrant a respirator's use. A full face positive pressure supplied-air respirator or a self contained breathing apparatus should be used when large spilled or fire.**
- **Other Protection: To maintain good health habits. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Isolate contaminated clothing and wash before reuse. DO NOT take working clothes home.**
- **Note: These precautions are for room temperature handling. Use at elevated temperatures or in aerosol spray applications may require added precautions.**

Section 9 - Physical and Chemical Properties

Appearance: Liquid, colorless.

Odor: Characteristic odor.

Odor threshold: N/A
pH: N/A
Melting point: -90℃.
Initial boiling point and boiling range: 215-219℃.
Flash Point: 79℃ (Open cup).
Evaporation rate: 0.03 (nBuAc=1)
Flammability (solid, gas): N/A
Explosion Limits (vol% in air): 0.8%-6.4%.
Vapour pressure, kPa at 20℃: 0.20hPa(0.15mmHg).
Relative vapor density (air=1): 6.36
Density: 0.885g/mL at 25℃
Relative density of the vapour/air-mixture at 20℃ (air=1): 1.00
Solubility in water: None.
Octanol/water partition coefficient as log Pow: 3.67
Auto-ignition temperature: 252℃.
Decomposition temperature: N/A
Viscosity: 1.7cP at 20℃

Section 10 - Stability and Reactivity

Reactivity: Has not been reported.
Chemical Stability: Stable in closed containers under specified storage and handling conditions.
Possibility of hazardous reaction: Irritating to eyes, respiratory system and skin.
Conditions to Avoid: Incompatible substances, any sources of ignition or heat (e.g. open flames, smoking, hot surfaces).
Incompatibilities with Other Materials: Oxidizing agents.
Hazardous Decomposition Products: This product decomposes on heating and on burning producing toxic and irritant fumes including oxides of carbon, hydrocarbons and etc.
Hazardous Polymerization: The substance may polymerize spontaneously due to warming, under the influence of light and on contact with peroxides.

Section 11 - Toxicological Information

Acute Toxicity:

Composition: CAS# 103-11-7

- **RTECS# AT0855000**
- **LD50: 4400 mg/kg (Oral, mouse)**
- **LD50: 6500 μL/kg (Oral, rat)**
- **LD50: 6700 mg/kg (Oral, rat)**
- **LD50: 8480 μL/kg (Skin, rabbit)**

Composition: CAS# 7732-18-5

- **RTECS# ZC0110000**
- **LD50: ＞90 ml/kg (Oral, rat)**

Composition: CAS# 150-76-5

- **RTECS# SL7700000**
- **LD50: 1600 mg/kg (Oral, rat)**

Composition: CAS# 79-10-7

- **RTECS# AS4375000**
- **LD50: 2400 mg/kg (Oral, mouse)**
- **LD50: 280 mg/kg (Skin, rabbit)**
- **LC50: 5300 mg/m^3/2H (Inhalation, mouse)**

Potential Health Effects:

- **Eye: Contact with liquid or vapor of this product may cause eyes pain, and redness.**
- **Skin: May cause pain and redness. Repeated or prolonged contact may cause skin sensitization.**
- **Ingestion: May cause abdominal pain, nausea, vomiting, diarrhoea.**
- **Inhalation: Inhalation may cause cough, sore throat.**

Skin irritation/corrosion:

Composition: CAS# 103-11-7

- **Draize test, rabbit, skin: 20 mg/24H Moderate**

Composition: CAS# 79-10-7

- **Draize test, skin, rabbit: 5 mg/24H Severe**

Serious eye damage/irritation:

Composition: CAS# 103-11-7

- **Draize test, rabbit, eye: 5 mg Severe**
- **Draize test, rabbit, eye: 500 mg/24H Mild**

Composition: CAS# 79-10-7

- **Draize test, eye, rabbit: 1 mg Severe**
- **Draize test, eye, rabbit: 250 µg/24H Severe**

Respiratory or Skin sensitisation: No data available.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

Composition: CAS# 103-11-7

- **IARC: Group 3-Not classifiable as to carcinogenicity to humans.**
- **Not listed as a carcinogen by ACGIH, NTP, or CA Prop 65.**

Composition: CAS# 7732-18-5

- **Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.**

Composition: CAS# 150-76-5

- **Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.**

Composition: CAS# 79-10-7

- **ACGIH: A4-Not classifiable as a human carcinogen.**
- **IARC: Group 3-Not classifiable as to carcinogenicity to humans.**
- **Not listed as a carcinogen by NTP, or CA Prop 65.**

Reproductive Toxicity: No data available.

Specific target organ toxicity-Single exposure: No data available.

Specific target organ toxicity-Repeated exposure: No data available.

Aspiration hazard: No data available.

Medical condition aggravated by exposure: No data available.

Section 12 - Ecological Information

Ecological Toxicity:

Composition: CAS# 103-11-7

- **LC0 - Leuciscus idus melanotus - 9 mg/l - 48 h**
- **LC50 - Leuciscus idus melanotus - 23 mg/l - 48 h**
- **EC50 - Daphnia magna (Water flea) - 17.45 mg/l - 48 h**
- **EC50 - Scenedesmus subspicatus - 44 mg/l - 72 h**

Persistence and degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other adverse effects: No data available.

Other Information: Do not allow this material to be released to the

environment without proper treatment.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations.
The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Refer to Section 7 and Section 8 for additional handling information and protection of employees.

Section 14 - Transport Information

Not regulated as a hazardous material for transportation. (TDG 17 edition; IMDG CODE 2010 edition)
UN: N/A
UN Hazard Class: N/A
Shipping Name: N/A
Packaging Sign: N/A
Packaging group: N/A
Marine Pollutant (Y/N): No.
Transport in bulk according to MARPOL73/78 Annex Ⅱ and the IBC Code: N/A
Packaging Information: N/A
Transport Fashion: By sea, by train, by road.

Shipping Notice: N/A

Section 15 - Regulatory Information

Regulatory Information: Reference to the local, national, US, EU, CA, Australian, Korea, Japan, China and international regulations.

CAS No.	TSCA	IECSC	DSL/NDSL	ENCS	KECI	AICS	EINECS/ ELINCS/ NLP
103-11-7	Listed	Listed	Listed in DSL	Listed	Listed	Listed	Listed
7732-18-5	Listed	Listed	Listed in DSL	Listed	Listed	Listed	Listed
150-76-5	Listed	Listed	Listed in DSL	Listed	Listed	Listed	Listed
79-10-7	Listed	Listed	Listed in DSL	Listed	Listed	Listed	Listed

Section 16 - Additional Information

Issue Time: 2013-3-15
Issue Department: Technical department
Data review unit:
Modification record:
Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other Information:

ACGIH:（American Conference of Governmental Industrial Hygienists）; AICS:（Australian Inventory of Chemical Substances）; CAS:（Chemical Abstracts Service）; DSL:（the Domestic Substances List of Canada）; EC:（European Commission）; KECI(KE-NO.):（Korea Existing Chemicals Inventory）; ENCS（MITI No.）:（Existing and New Chemical Substances of Japan）; GHS:（Globally Harmonized System of Classification and Labelling of Chemicals）; IARC:（International Agency for Research on Cancer）;IATA:（International Air Transport Association）; IECSC:（Inventory of Existing Chemical Substances in China）;IMDG:（International Maritime Dangerous Goods）; LD50:（Lethal dose, 50 percent kill）; NA.:（Not applicable.）; ND.:（No data available.）;NDSL:（the Non-domestic Substances List of Canada）; NFPA:（US National Federation of Paralegal Associations）; NIOSH:（US National Institute for Occupational Safety and Health）;NTP:（US National Toxicology Program）;OSHA:（US Occupational Safety and Health）; PC-STEL: （Permissible concentration concentration-time weighted average）; PC-TWA: （Permissible concentration concentration-short time exposure limit）;PEL: (Permissible Exposure Level); REL:（Recommended Exposure Limit）; RCRA: (Resource Conservation and Recovery Act); RTECS:（Registry of Toxic Effects of Chemical Substances）; STEL:（Short Term Exposure Limit）; TDG:（Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations）; TSCA:（Toxic Substances Control Act of USA）;TWA:（Time Weighted Average）;TLV: （Threshold Limit Value）

Note: *This test report is to replace the test report No. W12252032816D (English report). The No. W12252032816D (English report) test report is invalid and of no legal effect. All related information should be referred to the new test report.