

Material Safety Data Sheet

According to 91/155 EC (2001/58 EC)

Printing date: 29.08.2003

Reviewed on: 29.08.2003

1 Identification of substance:

- **Product details:**
- **Trade name:** butyl acrylate
- **Application of the substance / the preparation**
Auxiliary
Paints and varnishes
- **Supplier:**
ADAKEM KIMYA SAN. VE TIC. LTD. STI.

Tel.: +90-216-330 92 00
Fax: +90-216-330 91 81

- **Information department:** see above
- **Emergency information:** National Poisons Information Centre Tel.: +44 (0)870 6006266

2 Composition/Data on components:

- **Chemical characterization:**
- **CAS No. Description:**
141-32-2 butyl acrylate
- **Identification number(s):**
- **EINECS Number:** 205-480-7
- **EU Number:** 607-062-00-3

3 Hazards identification

- **Hazard description:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment:**

R 10 Flammable.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 43 May cause sensitisation by skin contact.

- **Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

4 First aid measures

- **General information:**
Immediately remove any clothing soiled by the product.
Take affected persons out of danger area and lay them down.
- **After inhalation:**
Remove victim from contaminated area. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Call a doctor.
In case of unconsciousness, place patients on their side in a stable position for transportation.
- **After skin contact:**
Clean effected skin thoroughly with water and a mild cleansing agent. No residues shall remain on the skin.
Do not use solvents or thinners.
If skin irritation continues, consult a doctor.

(Contd. on page 2)

— GB —

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Trade name: butyl acrylate

(Contd. of page 1)

- **After eye contact:**
Rinse opened eye for several minutes under running water.
If symptoms persist consult a doctor.
- **After swallowing:**
Rinse mouth with water.
Drink 3-4 glass of milk or water.
Do not induce vomiting.
Inform doctor. Do not give milk or fatty oils.
- **Information for doctor:**
- **The following symptoms may occur:**
Irritation of eyes and muscuous membrane.
After swallowing:
Irritation of mucuous membranes
Nausea
Vomiting
Headache
After inhalation:
Coughing
Local irritation symptoms
Oedema of the lungs
- **Treatment:**
In cases of irritation to the lungs, initial treatment with Dexametason metered aerosol.
Later observation for pneumonia and pulmonary oedema

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Direct jet water
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Dangerous decomposition product see chapter 10: stability and reactivity
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information:**
Cool endangered receptacles with water spray.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**



Wear protective equipment. Keep unprotected persons away.

- Use respiratory protective device against the effects of fumes/dust/aerosol.
- Ensure adequate ventilation
- Do not smoke - keep ignition sources away
- **Measures for environmental protection:**
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.
Prevent seepage into sewage system, workpits and cellars.
- **Measures for cleaning/collecting:**
Pick up with lime or anhydrous sodium carbonate.
Ensure adequate ventilation.
Clean the affected area carefully; suitable cleaners are:
Warm water and cleansing agent
Send for recovery or disposal in suitable receptacles.

(Contd. on page 3)

— GB —

Material Safety Data Sheet

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Trade name: butyl acrylate

(Contd. of page 2)

Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.
 Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
 Only handle and refill product in closed systems.
 Ensure that suitable extractors are available on processing machines
 Keep receptacles tightly sealed.
 Avoid contact with eyes and skin.
 Avoid inhalation of vapours.

- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges
 Work on containers and pipelines is permitted only after thorough purging and inerting.
 No welding.
 Use explosion-proof apparatus / fittings and spark-proof tools.

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Store in a cool location.
 Provide solvent resistant, sealed floor.
 Suitable material for receptacles and pipes: Aluminium.
 Suitable material for receptacles and pipes: Stainless steel.
 Observe national regulations for storage of flammable liquids.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.
 Store away from feed.
 Store separately from:
 Infectious substances (6.2)
 Compressed, liquefied and pressurized gas (2A)
 Substances liable to spontaneous combustion (4.2)
 Substances which, in contact with water, emit flammable gases (4.3)
 Organic peroxides (5.2)
 Explosives (1)
 Flammable solids (4.1A and 4.1B)
 Non-combustible toxic substances (6.1B)

- **Further information about storage conditions:**

Keep receptacle tightly sealed.
 Store in dry conditions.
 Protect from exposure to the light.
 Store in a cool place.

- **Recommended storage temperature:**

In the pure, unstabilized state it can only be stored below -10° C.
 Stabilized below 25° C.

- **Storage class** 3A Flammable Liquids

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 4)

Material Safety Data Sheet

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Reviewed on: 29.08.2003

Trade name: butyl acrylate

(Contd. of page 3)

· **Components with limit values that require monitoring at the workplace:**

141-32-2 butyl acrylate

OES Short-term value: 26 mg/m³, 5 ppmLong-term value: 5 mg/m³, 1 ppm

New, IOELV

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures should be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not eat or drink while working.

Use skin protection cream for skin protection.

Provide eye bath.

If larger quantities are handled provide emergency showers.

· **Breathing equipment:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Short term filter device:

Filter AX. (colour coding brown; DIN EN 141)

· **Protection of hands:**

Protective gloves.

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

After use of gloves apply skin-cleaning agents and skin cosmetics.

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Glove (tree-ply) - PE/EVAL/PE

(PE=Polyethylene; EVAL=Ethylene-vinyl-alcohol-copolymer)

· **Penetration time of glove material:**

Penetration time: > 8 hours

The exact break-through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Not suitable are gloves made of the following materials:**

Natural rubber, NR

Nitrile rubber, NBR

Polychloropren rubber (CR)

Fluorocarbon rubber (FKM)

PVC gloves

Butyl rubber, BR

· **Eye protection:**

Basket goggles (DIN EN 58211, code number 3) or face protection shield.

If vapours or aerosols which may injure the eyes arise,

wearing of a full mask is recommended.

· **Body protection:** Flame retarding, antistatic protective clothing.

9 Physical and chemical properties:

· **General Information**

Form:

Fluid

Colour:

Colourless

(Contd. on page 5)

— GB —

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(Contd. of page 4)

Odour:	Pungent
Change in condition:	
Melting point/Melting range:	-64.6°C
Boiling point/Boiling range:	145°C
Flash point:	37°C
Ignition temperature:	275°C
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	1.2 Vol %
Upper:	8 Vol %
Vapour pressure at 20°C:	4.3 hPa
Density at 20°C:	0.8898 g/cm ³
Solubility in / Miscibility with Water at 20°C:	1.4 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.
Danger of polymerisation by prolonged heating
Pay attention to sufficient concentration of the inhibitor.
- **Materials to be avoided:**
Strong bases
Strong oxidants
Acids
- **Dangerous reactions:**
Reactions with above-mentioned substances
Danger of polymerization
- **Dangerous products of decomposition:**
In the case of fire or at high temperatures the formation of the following decomposition products is possible.
Irritant gases/vapours
- **Additional information:** Sensitive to light

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**
Oral LD₅₀ 900 mg/kg (rat)
Dermal LD₅₀ 2000 mg/kg (rabbit)
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
Inhalation of high vapour concentrations may cause irritation of eyes, nose and respiratory tract.
After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Presently there are no ecotoxicological values available.

(Contd. on page 6)

— GB —

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(Contd. of page 5)

· General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Danger to drinking water is possible if large quantities leak into the ground or into water course.

13 Disposal considerations

· Product:**· Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Must be specially treated adhering to official regulations.

· Uncleaned packagings:**· Recommendation:**

Disposal must be made according to official regulations.
Packagings that cannot be cleansed are to be disposed of in the same manner as the product.
If not officially regulated non contaminated packagings can be used for recycling or treated like household garbage.

14 Transport information

· Land transport ADR/RID (cross-border)

- **ADR/RID class:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 39
- **UN-Number:** 2348
- **Packaging group:** III
- **Label:** 3
- **Description of goods:** 2348 BUTYL ACRYLATES, STABILIZED

· Maritime transport IMDG:

- **IMDG Class:** 3
- **UN Number:** 2348
- **Label:** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Proper shipping name:** BUTYL ACRYLATES, STABILIZED

· Air transport ICAO-TI and IATA-DGR:

- **ICAO/IATA Class:** 3
- **UN/ID Number:** 2348
- **Label:** 3
- **Packaging group:** III

(Contd. on page 7)
— GB —

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(Contd. of page 6)

Proper shipping name: BUTYL ACRYLATES, STABILIZED

15 Regulations

Markings according to EC guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials
EC-labelling

Code letter and hazard designation of product:

Xi Irritant

Risk phrases:

10 Flammable.
36/37/38 Irritating to eyes, respiratory system and skin.
43 May cause sensitisation by skin contact.

Safety phrases:

9 Keep container in a well-ventilated place.

Special labelling of certain preparations:

Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Annex I to this Directive.

However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the manufacturer or any person who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilised".

National regulations

Information about limitation of use: Restrictions on juvenile employment must be observed.

Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

16 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.

Department issuing MSDS:

KFT-Chemieservice Marienstr. 3 D-64347 Griesheim
Postfach 1451 D-64345 Griesheim
Tel.: +49-6155-823241 Fax: +49-6155-823246

Contact: Angelika Torges