

Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: Solvent-20

· CAS Number:

112-15-2

• **EC number:** 203-940-1

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

- · Sector of Use SU16 Manufacture of computer, electronic and optical products, electrical equipment
- · Application of the substance / the mixture Solvent for thinning and cleaning
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Kayaku Advanced Materials, Inc.

200 Flanders Road Westborough, MA 01581 Tel: (617) 965-5511 Fax: (617) 965-5818

· Further information obtainable from:

Product Safety

Email: productsafety@kayakuAM.com

1.4 Emergency telephone number:

Kayaku Advanced Materials: 617-965-5511

Kayaku Advanced Materials <u>: 61/-965-5511</u> Chemtrec USA Emergency <u>:</u> 800-424-9300 (24 hr)

Chemtrec International Emergency: 703-527-3887 (24 hr)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



Eye Irrit. 2 H319 Causes serious eye irritation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

H319 Causes serious eye irritation.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

(Contd. on page 2)



Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

Trade name: Solvent-20

(Contd. of page 1)

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

P337+P313 If eye irritation persists: Get medical advice/attention.

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

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

regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT**: Not applicable. · **vPvB**: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.1 Chemical characterisation: Substances
- · CAS No. Description

112-15-2 Diethylene glycol monoethyl ether acetate

- · Identification number(s)
- **EC** number: 203-940-1

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact:

Wash eyes immediately with a large amount of water or normal saline, occasionally lifting upper and lower eye lids until no evidence of chemical remains (about 20 minutes). Remove contact lenses if present and easy to remove. Seek immediate medical attention.

- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

Alcohol resistant foam

Fire-extinguishing powder

ABC powder

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)



Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

Trade name: Solvent-20

(Contd. of page 2)

· 5.3 Advice for firefighters

· Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaust at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Protect against electrostatic charges.

Keep ignition sources away - Do not smoke.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions).

Do not store together with oxidising and acidic materials.

· Further information about storage conditions:

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing

(Contd. on page 4)



Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

Trade name: Solvent-20

(Contd. of page 3)

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin. • Respiratory protection: Not required.

· Protection of hands:



Protective gloves

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

· 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.

· Penetration time of glove material

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

· Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on	basic pl	hysical a	nd ch	iemical	properties
--------------------	----------	-----------	-------	---------	------------

· General Information

· Appearance:

Form: Liquid
Colour: Colourless
Odour: Sweetish
Odour threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/freezing point: -25 °C Initial boiling point and boiling range: 217.4 °C

· Flash point: 98 °C

· Flammability (solid, gas): Not applicable.

• Ignition temperature: 310 °C

• Decomposition temperature: Not determined.

· Auto-ignition temperature: Not determined.

• Explosive properties: Product does not present an explosion hazard.

· Explosion limits:

Lower:Not determined.Upper:Not determined.

(Contd. on page 5)



Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

Trade name: Solvent-20

	(Contd. of p	page 4)
· Vapour pressure at 25 °C:	0.13 hPa	
Density at 20 °C:	1.0096 g/cm³	
Relative density	Not determined.	
Vapour density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Not miscible or difficult to mix.	
Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Organic solvents:	0.0 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability Stable
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight. Contact with incompatible materials.

- · 10.5 Incompatible materials: Strong Oxidizing Agents, Strong Acids, Strong Bases
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.



Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

Trade name: Solvent-20

(Contd. of page 5)

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · 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.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal must be made in accordance with International, National, and regional regulations.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport informa	tion	
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Not Regulated	
· 14.2 UN proper shipping name · ADR · ADN, IMDG, IATA	Void Not Regulated	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Not Regulated	
· 14.4 Packing group · ADR, IMDG, IATA	Not Regulated	
· 14.5 Environmental hazards:	Not applicable.	
· 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Ann Marpol and the IBC Code	e ex II of Not applicable.	
· UN ''Model Regulation'':	Void	



Printing date 31.03.2020 Version number 2 Revision: 31.03.2020

Trade name: Solvent-20

(Contd. of page 6)

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

- · Classification according to Regulation (EC) No 1272/2008

 Art. 9(1) of Regulation (EC) No. 1272/2008 was used for classification purposes.
- · Department issuing SDS: Product safety department
- · Contact: Tom Cole, EHS Manager (tcole@kayakuAM.com)
- Revision History: The manufacturer information in Section 1 has been updated.
- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

- EU