

PUNKT 1: Identifikation af stoffet / blanding og af selskabet / virksomheden

1.1. Produkt identifikation

Produkt form : Mixture
 Produktnavn : BRAWO LR
 UFI : 2QX0-W032-F00W-JGDS

1.2. Relevante identificerede anvendelser af stoffet eller blandingen og anvendelser, der frarådes

1.2.1. Relevante identificerede anvendelser

Hovedbrugskategori : Industriel brug
 Industriel/professionel brug spec Brug af : Industriel
 stoffet/blanding : Harpikssystem, der anvendes til fremstilling af glasfiber armeret plast eller ikke-forstærkede produkter

1.2.2. Anvendelser frarådes

Ingen yderligere information tilgængelig

1.3. Leverandør oplysninger – som har lavet sikkerhedsdatbladet

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 BLECHHAMMERWEG 13-17
 67659 KAISERSLAUTERN - Deutschland
 T +49 631 20561-100
info@brawoliner.com - www.brawosystems.com

1.4. Nødtelefonnummer

Land	Organisation/virksomhed	Adresse	Nødtelefon	Kommentar
Danmark	Gifflinjen - Akuthjælp ved forgiftning- døgnet rundt. Bispebjerg Hospital	Bispebjerg Bakke 23E, opgang 20C 2400 Kbh NV	+45 82121212	

PUNKT 2: Fareidentifikation

2.1. Klassificering af stoffet eller blandingen

Klassificering i henhold til forordning (EC) No. 1272/2008 [CLP]

Hudætsning/-irritation, Kategori 2 H315
 Alvorlig øjenskade/øjenirritation, Kategori 1 H318
 hudsensibilisering, Kategori 1 H317
 Specifik målorgantoksicitet — enkelt eksponering, kategori 3, irritation af luftvejene H335
 Farlig for vandmiljøet — Kronisk fare, Kategori 2 H411
 Fuldstændig tekst af H-sætninger : se afsnit 16

Uønskede fysisk-kemiske, menneskers sundhed og miljømæssige virkninger

Ingen yderligere information tilgængelig

2.2. Fareidentifikation

Mærkning i henhold til forordning (EC) No. 1272/2008 [CLP]

Farepiktogrammer (CLP) :



GHS05

GHS07

GHS09

Signalord (CLP) :

Advarsel

Farlige ingredienser :

(1-methyl-1,2-ethanediy)bis[oxy(methyl-2,1-ethanediy)] diacrylate; Poly(oxy-1,2-ethanediy),a-(1-oxo-2-propen-1-yl)-w-[(1-oxo-2-propen-1-yl)oxy]; methacrylic acid; 2-methylpropenoic acid

Faresætninger (CLP) :

H315 - Forårsager hudirritation.
 H317 - Kan forårsage allergisk hudreaktion.
 H318 - Forårsager alvorlig øjenskade.
 H335 - Kan forårsage irritation af luftvejene.
 H411 - Giftig for vandlevende organismer, med langvarige virkninger.

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Sikkerhedsdatblad

Ifølge (EC) No. 1907/2006 (REACH) med sin ændringsforordning (EU) 2015/830

Førstehjælp efter indtagelse : Ring omgående til en GIFTINFORMATION eller en læge. Skyl munden med vand. Gå ud i fri luft og ventiler det formodede område. Forsøg aldrig at fremkalde opkastning: risiko for indånding. Giv aldrig noget gennem munden til en bevidstløs person. Kemiske forbrændinger skal straks behandles af en læge.

4.2. Vigtigste symptomer og virkninger, både akutte og forsinkede

Symptomer/virkninger : Hyppige eller langvarige kontakter kan ødelægge og udtørre huden, hvilket fører til ubehag og dermatitis.

Symptomer/virkninger efter indånding : Hoste. Kan forårsage irritation af luftvejene.

Symptomer/virkninger efter hudkontakt : Irritation. Smerte. Rødme. Forsinket hudirritation og blærer.

Symptomer/virkninger efter øjenkontakt : Rødme. Smerte. Lacrimation.

Symptomer/virkninger efter indtagelse : Indtagelse kan forårsage kvalme og opkastning.

Kroniske symptomer : Der er potentielle kroniske sundhedseffekter at overveje.

4.3. Information ved akut lægehjælp og nødvendig specialbehandling

Behandle symptomatisk. VED INDTAGELSE: Ring omgående til en GIFTINFORMATION eller en læge. Fremkald IKKE opkastning.

PUNKT 5: Brandbekæmpelse

5.1. Slukningsmidler

Egnede slukningsmidler : Vandspray. Tørt pulver. Skum. Carbondioxid.

5.2. Særlige farer forbundet med stoffet eller blandingen

Brandfare : Opvarmning vil medføre en trykstigning med risiko for sprængning. Giftig for organismer, der lever i vand, kan forårsage uønskede langtidsvirkninger i vandmiljøet. Lad ikke afløb fra brandslukning komme ud i afløb eller vandløb.

Farlige nedbrydningsprodukter i tilfælde af brand : Der kan frigives giftige dampe. Carbondioxid. Carbonmonoxid. metalliske oxider. Brand vil producere tæt sort røg. Aldehyder. Organiske syrer.

5.3. Anvisninger for brandmandskab

Brandslukningsinstruktioner : Gå ikke ind i brandområdet uden passende beskyttelsesudstyr, herunder åndedrætsværn. I tilfælde af brand: Evakuer området.

Beskyttelse under brandslukning : Bær anbefalet personlige værnemidler. EN 469. Gå ikke ind i brandområdet uden passende beskyttelsesudstyr, herunder åndedrætsværn. Standard EN 469 - Beskyttelsesbeklædning til brandmænd. Standard - EN 659: Beskyttelseshandsker til brandmænd.

PUNKT 6: Forholdsregler over for udslip ved uheld

6.1. Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer

6.1.1. For ikke trænet personel i en nødsituation

Nødprocedurer : Evakuer området. Kun kvalificeret personale udstyret med passende beskyttelsesudstyr må gribe ind. Evakuer unødvendigt personale. Udluft spildområdet. Rør eller gå ikke på det spildte produkt. Bær egnet åndedrætsværn i tilfælde af utilstrækkelig ventilation. Bær personlige værnemidler.

6.1.2. Til beredskabspersonale

Beskyttelsesudstyr : Forsøg ikke at handle uden passende beskyttelsesudstyr. For yderligere information henvises til afsnit 8: "Eksponeringskontrol/personlige værnemidler".

6.2. Miljøbeskyttelsesanstaltninger

Undgå spredning og dræning af spildt materiale og undgå kontakt med jord, vand, afløb og kloak. Underret de kompetente myndigheder, hvis produktet har forårsaget miljøforurening (kloaksystemer, overfladevand, jord eller luft). Stoffet er vandforurenende. Skadelig for vandlevende organismer med langvarige virkninger. Saml spild.

6.3. Metoder og materiale til inddæmning og oprydning

For inddæmning : Stop lækage uden risici, hvis det er muligt. Inddæm og opsaml spild med ikke-brændbare absorberende materialer (f.eks. sand, jord, diatoméjord, vermiculit) og overfør til en beholder til bortskaffelse i henhold til lokale/nationale regler (se afsnit 13). Hvis det er tilgængeligt, skal du bruge skum til at dække spildet og reducere brandrisikoen. I tilfælde af dumpning i vand, indeholde produktet med flydende barrierer eller andet udstyr. Brugen af dispergeringsmidler bør anbefales af en ekspert og om nødvendigt godkendes af de lokale myndigheder.

Metoder til oprydning : Spild væske opsamles i absorberende materiale. Underret myndighederne, hvis produktet kommer i kloakker eller offentligt vand.

Andre oplysninger : Bortskaf materialer eller faste rester på et autoriseret sted.

6.4. Henvisning til andre afsnit

For yderligere information henvises til afsnit 8: "Eksponeringskontrol/personlige værnemidler". For yderligere information henvises til afsnit 13.

PUNKT 7: Håndtering og opbevaring

7.1. Forholdsregler for sikker håndtering

Beskyttelsesforanstaltninger : Bær personlige værnemidler. Undgå kontakt med hud, øjne og tøj. Indånd ikke dampe. Sørg for god ventilation af arbejdsstationen.

Hygiene measures : Spis, drik eller ryg ikke, når du bruger dette produkt. Vask hænder og andre udsatte områder med mild sæbe og vand, før du spiser, drikker eller ryger, og når du forlader arbejdet. Tag straks alt forurenet tøj af og vask det før genbrug.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool. Keep only in original container. Protect from sunlight. Protect from moisture. Store locked up. Keep container tightly closed. Opened containers must be carefully closed and kept upright to avoid leakage. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.3. Specific end use(s)

Resin system used in the manufacture of glass fibre reinforced plastics or non-reinforced products.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

(1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)] diacrylate (42978-66-5)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	2.77 mg/kg bodyweight/day
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Long-term - systemic effects, inhalation	24.48 mg/m ³
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methacrylic acid; 2-methylpropenoic acid (79-41-4)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	4.25 mg/kg bodyweight/day
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Long-term - local effects, inhalation	88 mg/m ³
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8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction.

Materials for protective clothing:

Wear overalls or long sleeved shirt. (EN 467). Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Hand protection:

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. For prolonged or repeated handling, use the following type of gloves: Recommended: > 8 hours (breakthrough time): nitrile rubber. The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3 : 2003. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Eye protection:

Safety glasses with side shields. (EN166)

Skin and body protection:

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. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Wear a chemically resistant protective suit

Respiratory protection:

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapour (Type A) and particulate filter (EN 140).

Environmental exposure controls:

Avoid release to the environment. Emissions from ventilation or processing equipment must be monitored to ensure they comply with the requirements of environmental protection legislation. In some cases, scrubbers, filters or technical modifications of the process equipment are necessary to reduce the emission to an acceptable level.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : yellowish. clear.

Odour : characteristic.

Odour threshold : No data available

pH : No data available

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Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 110 °C Setaflash Closed Cup
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Heating may cause a fire
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.11 (Water = 1)
Density	: 1.11 g/ml (23°C)
Solubility	: Insoluble in: Cold and hot water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 2800 - 3200 mPa.s (23°C)
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: No data available
Acute toxicity (dermal)	: No data available
Acute toxicity (inhalation)	: No data available

methacrylic acid; 2-methylpropenoic acid (79-41-4)

LD50 oral rat	1060 mg/kg
LD50 dermal rabbit	500 mg/kg
LC50 inhalation rat (mg/l)	7.1 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation. May produce an allergic reaction
Serious eye damage/irritation	: Causes serious eye damage
Respiratory or skin sensitisation	: May cause respiratory irritation
Germ cell mutagenicity	: No data available
Carcinogenicity	: No data available
Reproductive toxicity	: No data available
STOT-single exposure	: No data available
STOT-repeated exposure	: No data available
Aspiration hazard	: No data available
Potential adverse human health effects and symptoms	: With persons who have once been sensitised, a severe allergic reaction can occur thereafter when using this product at very low concentrations.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Toxic to aquatic life with long lasting effects.

methacrylic acid; 2-methylpropenoic acid (79-41-4)

LC50 fish 1	85 mg/l
EC50 Daphnia 1	> 130 mg/l Daphnia Magna

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions. The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste 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.
Sewage disposal recommendations	: The generation of waste should be avoided or minimized whenever possible. Waste packaging should be recycled; Incineration or landfill should only be considered when recycling is not feasible. This material and his container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Product/Packaging disposal recommendations	: The European Waste Catalogue classification of this product, when disposed of as waste is 08 0111: waste paint and varnish containing organic solvents or other dangerous substances.
Ecology - waste materials	: This product is regarded as hazardous waste as defined by EU Directive 91/689/EEC.

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

14.1. UN number

UN-No. (ADR)	: UN 3082
UN-No. (IMDG)	: UN 3082
UN-No. (IATA)	: UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (((1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]diacrylate)), 9, III, (E)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (((1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]diacrylate)), 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (((1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1-ethanediyl)]diacrylate)), 9, III

14.3. Transport hazard class(es)

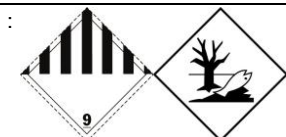
ADR

Transport hazard class(es) (ADR)	: 9
Danger labels (ADR)	: 9

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IMDG

Transport hazard class(es) (IMDG) : 9

Danger labels (IMDG) : 9



IATA

Transport hazard class(es) (IATA) : 9

Hazard labels (IATA) : 9



14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M6

Special provisions (ADR) : 274, 335, 601, 375

Limited quantities (ADR) : 5I

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T4

Portable tank and bulk container special provisions (ADR) : TP1, TP29

Tank code (ADR) : LGBV

Vehicle for tank carriage : AT

Transport category (ADR) : 3

Special provisions for carriage - Packages (ADR) : V12

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13

Hazard identification number (Kemler No.) : 90

Orange plates :

Tunnel restriction code (ADR) : E

Transport by sea

Special provisions (IMDG) : 274, 335, 969

Limited quantities (IMDG) : 5 L

Excepted quantities (IMDG) : E1

Packing instructions (IMDG) : P001, LP01

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Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
Special provisions (IATA)	: A97, A158, A197
ERG code (IATA)	: 9L

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

IBC code	: Not available.
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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage

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H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H411	Toxic to aquatic life with long lasting effects

SDS EU (REACH Annex II)

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