SAFETY DATA SHEET
(in accordance with Regulation (EU) 2020/878)

CARBOTHANE 134 CG - B

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

Product Name: CARBOTHANE 134 CG- B
Product Code: J2180908B
UFI: DM9J-806W-E00E-4TQ2

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

Hardener, in combination with hydroxylated polymers, mainly polyesters and polyacrylates, for the preparation of 2-component systems. PROFESSIONAL USE

Uses advised against:
Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.
Company's identification:

Company: **Carboline**
Address: C/Numancia, 185 Entresuelo 1ª
City: 08034 Barcelona
Province: Barcelona
Telephone: +34 932 09 60 19
E-mail: iboter@carboline.com

1.4 Emergency telephone number: (Available 24 hours)
Toxicological Information Service (National Institute of Toxicology and Forensic Sciences) Telephone: +34 91 5620420.
Information in Spanish (24 hours/365 days). Solely for the purpose of providing a health response in case of emergency.

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance or mixture.
In accordance with Regulation (EC) No 1272/2008:
Acute Tox. 4 : Harmful if inhaled.
Flam. Liq. 3 : Flammable liquid and vapour.
Skin Irrit. 2 : Causes skin irritation.
Skin Sens. 1 : May cause an allergic skin reaction.
STOT SE 3 : May cause respiratory irritation.

2.2 Label elements.
Labelling in accordance with Regulation (EC) No 1272/2008:
Pictograms:

Signal Word:

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Warning

Hazard statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/&
P321	Specific treatment (see ... on this label).
P370+P378	In case of fire: Use... to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to &

EUH statements:

EUH204	Contains isocyanates. May produce an allergic reaction.

Contains:
n-butyl acetate
2-methoxy-1-methylethyl acetate
xylene
Hexamethylene diisocyanate, oligomers

2.3 Other hazards.

The mixture does not contain substances classified as PBT.
The mixture does not contain substances classified as vPvB.
The mixture does not contain any endocrine disrupting properties substances.

The product may have the following additional risks:
May form explosible dust-air mixture if dispersed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.
Not applicable.

3.2 Mixtures.
Substances posing a danger to health or the environment in accordance with the Regulation (EC) No. 1272/2008, assigned a Community exposure limit in the workplace, and classified as PBT/vPvB or included in the Candidate List:

Identifiers	Name	Concentrate	(*)Classification - Regulation (EC) No 1272/2008	
			Classification	Specifics concentration limits and Acute toxicity estimate
CAS No: 28182-81-2 EC No: 931-274-8 Registration No: 01-2119485796-17-XXXX	Hexamethylene diisocyanate, oligomers	29 - 74.99 %	Acute Tox. 4, H332 - Skin Sens. 1, H317 - STOT SE 3, H335	-
Index No: 601-022-00-9 CAS No: 1330-20-7 EC No: 215-535-7 Registration No: 01-2119488216-32-XXXX	[1] xylene (contains less than 0.1% by weight of cumene)	10 - 49.99 %	Acute Tox. 4 *, H312 - Acute Tox. 4 *, H332 - Flam. Liq. 3, H226 - Skin Irrit. 2, H315	-

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Index No: 607-025-00-1 CAS No: 123-86-4 EC No: 204-658-1 Registration No: 01-2119485493-29-XXXX	n-butyl acetate	1 - 19.99 %	Flam. Liq. 3, H226 - STOT SE 3, H336	-
Index No: 607-195-00-7 CAS No: 108-65-6 EC No: 203-603-9 Registration No: 01-2119475791-29-XXXX	[1] 2-methoxy-1-methylethyl acetate	1 - 19.99 %	Flam. Liq. 3, H226 - STOT SE 3, H336	-
Index No: 601-023-00-4 CAS No: 100-41-4 EC No: 202-849-4 Registration No: 01-2119489370-35-XXXX	[1] ethylbenzene	0 - 9.99 %	Acute Tox. 4 *, H332 - Asp. Tox. 1, H304 - Flam. Liq. 2, H225 - STOT RE 2, H373(órganos de audición)	-
Index No: 615-012-00-7 CAS No: 4083-64-1 EC No: 223-810-8 Registration No: 01-2119980050-47-XXXX	4-isocyanatosulphonyltoluene, tosyl isocyanate	0.1 - 0.99 %	Eye Irrit. 2, H319 - Resp. Sens. 1, H334 - Skin Irrit. 2, H315 - STOT SE 3, H335	Eye Irrit. 2, H319: C g 5 % STOT SE 3, H335: C g 5 % Skin Irrit. 2, H315: C g 5 %
Index No: 615-011-00-1 CAS No: 822-06-0 EC No: 212-485-8 Registration No: 01-2119457571-37-XXXX	hexamethylene-di-isocyanate	0 - 0.099 %	Acute Tox. 3 *, H331 - Eye Irrit. 2, H319 - Resp. Sens. 1, H334 - Skin Irrit. 2, H315 - Skin Sens. 1, H317 - STOT SE 3, H335	Resp. Sens. 1, H334: C g 0,5 % Skin Sens. 1, H317: C g 0,5 %

(*) *The complete text of the H phrases is given in section 16 of this Safety Data Sheet.*
** See Regulation (EC) No. 1272/2008, Annex VI, section 1.2.*
[1] Substance with a European Union exposure limit in the workplace (see section 8.1).
[2] Substance with a national workplace exposure limit (see section 8.1).

SECTION 4: FIRST AID MEASURES.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

4.1 Description of first aid measures.

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.

Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance. The use of personal protective equipment is recommended for people providing first aid (see section 8).

Eye contact.

Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.

Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.

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If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.
Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.
Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.
It may cause an allergic reaction, dermatitis, redness or inflammation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Do not induce vomiting. If the person vomits, clear the respiratory tract.

SECTION 5: FIREFIGHTING MEASURES.

Flammable product, the necessary prevention measures should be taken in order to avoid risks, In case of fire, the following measures are recommended:

5.1 Extinguishing media.
Suitable extinguishing media:
Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media:
Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

5.2 Special hazards arising from the substance or mixture.
Special risks.
Exposure to combustion or decomposition products can be harmful to your health.

During a fire and depending on its magnitude the following may occur:
- Carbon monoxide, carbon dioxide.
- Flammable vapors or gases.

5.3 Advice for firefighters.
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Follow the instructions given in the emergency or fire evacuation plan or plans if available.

Fire protection equipment.
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots. During extinction and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protection gloves, heat-reflecting suits or gas-tight suits may be required.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.
Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.

6.2 Environmental precautions.
Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3 Methods and material for containment and cleaning up.
Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant.
Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations (see section 13).

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6.4 Reference to other sections.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.
The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.
The product can be electrostatically charged: always use earth grounds when transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors.
Keep the container tightly closed and isolated from heat sources, sparks, and fire. Do not use tools that can cause sparks. For personal protection, see section 8.
In the application area, smoking, eating, and drinking must be prohibited.
Follow legislation on occupational health and safety.
Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 25 º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

Classification and threshold amount of storage in accordance with Annex I to Directive 2012/18/EU (SEVESO III):

		Qualifying quantity (tonnes) for the application of	
Code	**Description**	**Lower-tier requirements**	**Upper-tier requirements**
P5c	FLAMMABLE LIQUIDS	5.000	50.000

7.3 Specific end use(s).
ENDURECEDOR

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.

Work exposure limit for:

Name	CAS No.	Country	Limit value	ppm	mg/m³
xylene	1330-20-7	European Union [1]	**Eight hours**	50 (skin)	221 (skin)
			Short term	100 (skin)	442 (skin)
2-methoxy-1-methylethyl acetate	108-65-6	European Union [1]	**Eight hours**	50 (skin)	275 (skin)
			Short term	100 (skin)	550 (skin)
ethylbenzene	100-41-4	European Union [1]	**Eight hours**	100 (skin)	442 (skin)
			Short term	200 (skin)	884 (skin)

[1] According both Binding Occupational Esposure Limits (BOELVs) and Indicative Occupational Exposure Limits (IOELVs) adopted by Scientific Committee for Occupational Exposure Limits to Chemical Agents (SCOEL).
The product does NOT contain substances with Biological Limit Values.
Concentration levels DNEL/DMEL:

Name	DNEL/DMEL	Type	Value

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xylene CAS No: 1330-20-7 EC No: 215-535-7	DNEL (Workers)	Inhalation, Chronic, Systemic effects	77 (mg/m³)
n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	DNEL (Workers)	Inhalation, Chronic, Systemic effects	480 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	102,34 (mg/m³)
	DNEL (Workers)	Inhalation, Short term, Systemic effects	960 (mg/m³)
	DNEL (Consumers)	Inhalation, Short term, Systemic effects	859,7 (mg/m³)
	DNEL (Workers)	Inhalation, Chronic, Local effects	480 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Local effects	102,34 (mg/m³)
	DNEL (Workers)	Inhalation, Short term, Local effects	960 (mg/m³)
	DNEL (Consumers)	Inhalation, Short term, Local effects	859,7 (mg/m³)
	DNEL (Consumers)	Oral, Chronic, Systemic effects	3,4 (mg/kg bw/day)
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	3,4 (mg/kg bw/day)
2-methoxy-1-methylethyl acetate CAS No: 108-65-6 EC No: 203-603-9	DNEL (Workers)	Inhalation, Chronic, Systemic effects	275 (mg/m³)
	DNEL (Consumers)	Inhalation, Chronic, Systemic effects	33 (mg/m³)
	DNEL (Workers)	Dermal, Chronic, Systemic effects	153,5 (mg/kg bw/day)
	DNEL (Consumers)	Dermal, Chronic, Systemic effects	54,8 (mg/kg bw/day)
	DNEL (Consumers)	Oral, Chronic, Systemic effects	1,67 (mg/kg bw/day)
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	DNEL (Workers)	Inhalation, Chronic, Systemic effects	77 (mg/m³)
hexamethylene-di-isocyanate CAS No: 822-06-0 EC No: 212-485-8	DNEL (Workers)	Inhalation, Chronic, Local effects	0,035 (mg/m³)
	DNEL (Workers)	Inhalation, Chronic, Systemic effects	0,035 (mg/m³)

DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
Concentration levels PNEC:

Name	Details	Value
n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	aqua (freshwater)	0,18 (mg/l)
	aqua (marine water)	0,018 (mg/l)
	aqua (intermittent releases)	0,36 (mg/l)
	STP	35,6 (mg/l)
	sediment (freshwater)	0,981 (mg/kg sediment dw)
	sediment (marine water)	0,0981 (mg/kg sediment dw)
	soil	0,0903 (mg/kg soil dw)

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2-methoxy-1-methylethyl acetate CAS No: 108-65-6 EC No: 203-603-9	aqua (freshwater)	0,635 (mg/L)
	aqua (marine water)	0,0635 (mg/L)
	aqua (intermittent releases)	6,35 (mg/L)
	STP	100 (mg/L)
	sediment (freshwater)	3,29 (mg/kg sediment dw)
	sediment (marine water)	0,329 (mg/kg sediment dw)
	soil	0,29 (mg/kg soil dw)

PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.

8.2 Exposure controls.

Measures of a technical nature:
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

Concentration:	**100 %**
Uses:	**Endurecedor, en combinación con polímeros hidroxilados, principalmente poliésteres y poliacrilatos, para la preparación de sistemas de 2 componentes. USO PROFESIONAL**
Breathing protection:	
PPE:	Filter mask for protection against gases and particles. 
Characteristics:	«CE» marking, category III. The mask must have a wide field of vision and an anatomically designed form in order to be sealed and watertight.
CEN standards:	EN 136, EN 140, EN 405
Maintenance:	Should not be stored in places exposed to high temperatures and damp environments before use. Special attention should be paid to the state of the inhalation and exhalation valves in the face adaptor.
Observations:	Read carefully the manufacturer's instructions regarding the equipment's use and maintenance. Attach the necessary filters to the equipment according to the specific nature of the risk (Particles and aerosols: P1-P2-P3, Gases and vapours: A-B-E-K-AX), changing them as advised by the manufacturer.
Filter Type needed:	A2
Hand protection:	
PPE:	Protective gloves against chemicals. 
Characteristics:	«CE» marking, category III.
CEN standards:	EN 374-1, En 374-2, EN 374-3, EN 420
Maintenance:	Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.
Observations:	Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.

Material:	PVC (polyvinyl chloride)	Breakthrough time (min.):	> 480	Material thickness (mm):	0,35

Eye protection:	
PPE:	Protective goggles with built-in frame. 
Characteristics:	«CE» marking, category II. Eye protector with built-in frame for protection against dust, smoke, fog and vapour.
CEN standards:	EN 165, EN 166, EN 167, EN 168
Maintenance:	Visibility through lenses should be ideal. Therefore, these parts should be cleaned daily. Protectors should be disinfected periodically following the manufacturer's instructions.
Observations:	Some signs of wear and tear include: yellow colouring of the lenses, superficial scratching of the lenses, scraping etc.
Skin protection:	
PPE:	Anti-static protective clothing. 
Characteristics:	«CE» marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements.
CEN standards:	EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5
Maintenance:	In order to guarantee uniform protection, follow the washing and maintenance instructions provided by the manufacturer.

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Observations:	The protective clothing should offer a level of comfort in line with the level of protection provided in terms of the hazard against which it protects, bearing in mind environmental conditions, the user's level of activity and the expected time of use.
PPE: Characteristics:	Anti-static safety footwear. «CE» marking, category II.
CEN standards:	EN ISO 13287, EN ISO 20344, EN ISO 20346
Maintenance:	The footwear should be checked regularly
Observations:	The level of comfort during use and acceptability are factors that are assessed very differently depending on the user. Therefore, it is advisable to try on different footwear models and, if possible, different widths.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.
Physical state: Liquid
Colour: incoloro
Odour: Not applicable/Not available due to the nature/properties of the product
Odour threshold: Not applicable/Not available due to the nature/properties of the product
Melting point: Not applicable/Not available due to the nature/properties of the product
Freezing point: Not applicable/Not available due to the nature/properties of the product
Boiling point or initial boiling point and boiling range: 214 ºC (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Flammability: Not applicable/Not available due to the nature/properties of the product
Lower explosion limit: Not applicable/Not available due to the nature/properties of the product
Upper explosion limit: Not applicable/Not available due to the nature/properties of the product
Flash point: 31 ºC (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Auto-ignition temperature: Not applicable/Not available due to the nature/properties of the product
Decomposition temperature: Not applicable/Not available due to the nature/properties of the product
pH: Not applicable (Substance/mixture is non-soluble (in water)).
Kinematic viscosity: Not applicable/Not available due to the nature/properties of the product
Solubility: Not applicable/Not available due to the nature/properties of the product
Hydrosolubility: Not applicable/Not available due to the nature/properties of the product
Liposolubility: Not applicable/Not available due to the nature/properties of the product
Partition coefficient n-octanol/water (log value): Not applicable/Not available due to the nature/properties of the product
Vapour pressure: 1,679 (Estimation based on the indication of the Regulation (CE) Nº1272/2008.)
Absolute density: Not applicable/Not available due to the nature/properties of the product
Relative density: 0,920
Relative vapour density: Not applicable/Not available due to the nature/properties of the product
Particle characteristics: Not applicable/Not available due to the nature/properties of the product

9.2 Other information
Information with regard to physical hazard classes
Flammable liquids:
Sustained combustibility: Yes.

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity.
The product does not present hazards by their reactivity.

10.2 Chemical stability.
Stable under the recommended handling and storage conditions (see section 7).

10.3 Possibility of hazardous reactions.
Flammable liquid and vapour.

10.4 Conditions to avoid.
Avoid any improper handling.

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10.5 Incompatible materials.
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

10.6 Hazardous decomposition products.
No decomposition if used for the intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION.

IRRITANT MIXTURE. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.
IRRITANT MIXTURE. The inhalation of spray mist or suspended particulates can irritate the respiratory tract. It can also cause serious respiratory difficulties, central nervous system disorders, and in extreme cases, unconsciousness.

11.1 Information on hazard classes as defined in Regulation (EC) Nº 1272/2008.
Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.
Exposure to concentrations of solvent fumes above the work exposure limit can have negative effects (for example, irritation of the mucous membranes and respiratory system, adverse effects on the kidneys, liver, and the central nervous system). Among the symptoms are headaches, vertigo, fatigue, muscular weakness, drowsiness, and in extreme cases, unconsciousness.
Based on the properties of isocyanates and taking into account existing technical data on similar products, it appears that this product may cause irritation and / or acute awareness of the respiratory system, leading to an asthmatic condition, a wheezing and chest pressure. Therefore, sensitized individuals may show asthmatic symptoms when exposed to atmospheres containing concentrations below the level of exposure. Repeated exposure can lead to chronic respiratory diseases.
Toxicological information about the substances present in the composition.

Name	Acute toxicity			
	Type	Test	Kind	Value
xylene CAS No: 1330-20-7 EC No: 215-535-7	Oral	LD50 LD50 [1] AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956 [2] Study report, 1986, similar to EU Method B.1 (Acute Toxicity (Oral))	Rat rat (male)	4300 mg/kg bw [1] 3523 mg/kg bw [2]
	Dermal	LD50 LD50 [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974 [2] Publication, 1962, unnamed	Rabbit rabbit (male)	> 1700 mg/kg bw [1] 12126 mg/kg bw [2]
	Inhalation	LC50 LC50 [1] Raw Material Data Handbook, Vol.1: Organic Solvents, 1974. Vol. 1, Pg. 123, 1974 [2] The toxicological properties of hydrocarbon solvents, Hine CH, Zuidema HH (1970), Industrial Medicine 39, 215-200	Rat Rat	21,7 mg/l/4 h [1] 6350 ppm (4 h) [2]
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	Oral	LD50 [1] AMA Archives of Industrial Health. Vol. 14, Pg. 387, 1956	Rat	3500 mg/kg bw [1]
	Dermal	LD50 [1] Food and Cosmetics Toxicology. Vol. 13, Pg. 803, 1975	Rabbit	15400 mg/kg bw [1]
	Inhalation			

a) acute toxicity;
Product classified:
Acute toxicity (Inhalation), Category 4: Harmful if inhaled.

Acute Toxicity Estimate (ATE):
Mixtures:

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ATE (Dermal) = 4.341 mg/kg
ATE (Inhalation) = 14 mg/l/4 h (Vapours)

b) skin corrosion/irritation;
Product classified:
Skin irritant, Category 2: Causes skin irritation.

c) serious eye damage/irritation;
Based on available data, the classification criteria are not met.

d) respiratory or skin sensitisation;
Product classified:
Skin sensitiser, Category 1: May cause an allergic skin reaction.

e) germ cell mutagenicity;
Not conclusive data for classification.

f) carcinogenicity;
Not conclusive data for classification.

g) reproductive toxicity;
Not conclusive data for classification.

h) STOT-single exposure;
Product classified:
Specific target organ toxicity following a single exposure, Category 3: May cause respiratory irritation.

i) STOT-repeated exposure;
Based on available data, the classification criteria are not met.

j) aspiration hazard;
Based on available data, the classification criteria are not met.

11.2 Information on other hazards.
Endocrine disrupting properties
This product does not contain components with endocrine-disrupting properties with effects on human health.
Other information
There is no information available on other adverse health effects.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.

Name	Ecotoxicity			
	Type	Test	Kind	Value
xylene	Fish	LC50	Fish	15,7 mg/l (96 h) [1] [1] Bailey, H.C., D.H.W. Liu, and H.A. Javitz 1985. Time/Toxicity Relationships in Short-Term Static, Dynamic, and Plug-Flow Bioassays. In: R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212
	Aquatic	LC50	Crustacean	8,5 mg/l (48 h) [1]

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	invertebrates	[1] Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. Estuar.Coast.Mar.Sci. 6(4):365-373. Tatem, H.E. 1975. The Toxicity and Physiological Effects of Oil and Petroleum Hydrocarbons on Estuarine Grass Shrimp Palaemonetes pugio (Holthuis). Ph.D.Thesis, Texas A&M University, College Station, TX :133 p
CAS No: 1330-20-7 EC No: 215-535-7	Aquatic plants	
ethylbenzene	Fish	LC50 Fish 80 mg/l (96 h) [1] [1] Mayer, F.L.Jr., and M.R. Ellersieck 1986. Manual of Acute Toxicity: Interpretation and Data Base for 410 Chemicals and 66 Species of Freshwater Animals. Resour.Publ.No.160, U.S.Dep.Interior, Fish Wildl.Serv., Washington, DC :505 p. (USGS Data File)
	Aquatic invertebrates	LC50 Crustacean 16,2 mg/l (48 h) [1] [1] MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to Daphnia magna and Artemia. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p
CAS No: 100-41-4 EC No: 202-849-4	Aquatic plants	EC50 Algae 5 mg/l (72 h) [1] [1] Galassi, S., M. Mingazzini, L. Vigano, D. Cesareo, and M.L. Tosato 1988. Approaches to Modeling Toxic Responses of Aquatic Organisms to Aromatic Hydrocarbons. Ecotoxicol.Environ.Saf. 16(2):158-169. Masten, L.W., R.L. Boeri, and J.D. Walker 1994. Stategies Employed to Determine the Acute Aquatic Toxicity of Ethyl Benzene, a Highly Volatile, Poorly Water-Soluble Chemical. Ecotoxicol.Environ.Saf. 27(3):335-348

12.2 Persistence and degradability.
No information is available regarding the biodegradability of the substances present.
No information is available on the degradability of the substances present.
No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.
Information about the bioaccumulation of the substances present.

Name	Bioaccumulation			
	Log Pow	BCF	NOECs	Level
n-butyl acetate CAS No: 123-86-4 EC No: 204-658-1	1,78	-	-	Very low
ethylbenzene CAS No: 100-41-4 EC No: 202-849-4	3,15	-	-	Moderate

12.4 Mobility in soil.
No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.
No information is available about the results of PBT and vPvB assessment of the product.

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12.6 Endocrine disrupting properties.
This product doesn't contain components with environmental endocrine disrupting properties.

12.7 Other adverse effects.
The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.
No information is available about other adverse effects for the environment.

SECTION 13: DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: TRANSPORT INFORMATION.

Transport following ADR rules for road transport, RID rules for railway, ADN for inner waterways, IMDG for sea, and ICAO/IATA for air transport.
Land: Transport by road: ADR, Transport by rail: RID.
Transport documentation: Consignment note and written instructions
Sea: Transport by ship: IMDG.
Transport documentation: Bill of lading
Air: Transport by plane: ICAO/IATA.
Transport document: Airway bill.

14.1 UN number or ID number.
UN No: UN1263

14.2 UN proper shipping name.
Description:
ADR/RID: UN 1263, PAINT, 3, PG III, (D/E)
IMDG: UN 1263, PAINT, 3, PG III
ICAO/IATA: UN 1263, PAINT, 3, PG III

14.3 Transport hazard class(es).
Class(es): 3

14.4 Packing group.
Packing group: III

14.5 Environmental hazards.
Marine pollutant: No
Transport by ship, FEm 3 Emergency sheets (F 3 Fire, S - Spills): F-E,S-E

14.6 Special precautions for user.
Labels: 3

Hazard number: 30
Provisions concerning carriage in bulk ADR: Not authorized carriage in bulk in accordance with ADR.
Proceed in accordance with point 6.
ADR LQ: 5 L

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IMDG LQ: 5 L
ICAO LQ: 10 L

14.7 Maritime transport in bulk according to IMO instruments.
The product is not transported in bulk.

SECTION 15: REGULATORY INFORMATION.

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

Volatile organic compound (VOC)
VOC content (p/p): 45,7 %
VOC content: 420,44 g/l

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.
The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

Kind of pollutant to water (Germany): WGK 2: Hazardous to water. (Autoclassified according to the AwSV Regulations)

15.2 Chemical safety assessment.
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Complete text of the H phrases that appear in section 3:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.(órganos de audición)

Classification codes:

Acute Tox. 3 : Acute toxicity (Inhalation), Category 3
Acute Tox. 4 : Acute toxicity (Dermal), Category 4
Acute Tox. 4 : Acute toxicity (Inhalation), Category 4
Asp. Tox. 1 : Aspiration toxicity, Category 1
Eye Irrit. 2 : Eye irritation, Category 2
Flam. Liq. 2 : Flammable liquid, Category 2
Flam. Liq. 3 : Flammable liquid, Category 3
Resp. Sens. 1 : Respiratory sensitiser, Category 1
Skin Irrit. 2 : Skin irritant, Category 2
Skin Sens. 1 : Skin sensitiser, Category 1

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STOT RE 2 : Specific target organ toxicity following a repeated exposure, Category 2
STOT SE 3 : Specific target organ toxicity following a single exposure, Category 3

Changes regarding to the previous version:

- Change of the name of the product (SECTION 1.1).
- Change of the uses of the product (SECTION 1.2).
- Change in the hazard classification (SECTION 2.1).
- Removal of precautionary statements/hazard statements/pictograms/signal word (SECTION 2.2).
- Changes in the composition of the product (SECTION 3.2).
- Modification in the values of the physical and chemical properties (SECTION 9).
- Change in the hazard classification (SECTION 11.1).
- National legislative changes (SECTION 15.1).

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health hazards	Calculation method
Environmental hazards	Calculation method

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Information on the TSCA Inventory (Toxic Substances Control Act) USA:

CAS No	Name	State
28182-81-2	Hexamethylene diisocyanate, oligomers	Registered
1330-20-7	xylene	Registered
123-86-4	n-butyl acetate	Registered
108-65-6	2-methoxy-1-methylethyl acetate	Registered
100-41-4	ethylbenzene	Registered
4083-64-1	4-isocyanatosulphonyltoluene, tosyl isocyanate	Registered
822-06-0	hexamethylene-di-isocyanate	Registered

Canada DSL/NDSL Inventory Registration Status			
CAS No	**Name**	**State DSL**	**State NDSL**
28182-81-2	Hexamethylene diisocyanate, oligomers	Registered	Not
1330-20-7	xylene	Registered	Not
123-86-4	n-butyl acetate	Registered	Not
108-65-6	2-methoxy-1-methylethyl acetate	Registered	Not
100-41-4	ethylbenzene	Registered	Not
4083-64-1	4-isocyanatosulphonyltoluene, tosyl isocyanate	Registered	Not
822-06-0	hexamethylene-di-isocyanate	Registered	Not

Risk classification system NFPA 704:

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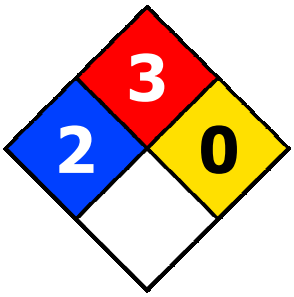

Health hazard: 2 (Hazardous)

Flammability: 3 (Below 100°F)

Reactivity: 0 (Stable)

Abbreviations and acronyms used:
ADR/RID: Agreement concerning the International Carriage of Dangerous Goods by Road.
AwSV: Facility Regulations for handling substances that are hazardous for the water.
BCF: Bioconcentration factor.
CEN: European Committee for Standardization.
DMEL: Derived Minimal Effect Level, exposure level corresponding to a low risk, that risk should be considered a tolerable minimum.
DNEL: Derived No Effect Level, level of exposure to the substance below which adverse effects are not anticipated.
EC50: Half maximal effective concentration.
PPE: Personal protection equipment.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organization.
IMDG: International Maritime Code for Dangerous Goods.
LC50: Lethal concentration, 50%.
LD50: Lethal dose, 50%.
NOEC: No observed effect concentration.
PNEC: Predicted No Effect Concentration, concentration of the substance below which adverse effects are not expected in the environmental compartment.
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.
WGK: Water hazard classes.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/
Regulation (EU) 2020/878.
Regulation (EC) No 1907/2006.
Regulation (EC) No 1272/2008.

The information given in this Safety Data Sheet has been drafted in accordance with COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemical substances and mixtures (REACH).

The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.

-End of safety data sheet.-