

Safety Data Sheet
WALLGARD REMOVER GEL

Safety Data Sheet dated: 14/06/2022 - version 3



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

1.1. Product identifier

Mixture identification:

Trade name: WALLGARD REMOVER GEL

Trade code: 901795

UFI: QC75-10R6-U00K-JMY7

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

Recommended use: Glycoether based graffiti gel remover

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Eye Irrit. 2 Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words



Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash hands thoroughly after handling.

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

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

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: WALLGARD REMOVER GEL

Hazardous components within the meaning of the CLP regulation and related classification:

Concentration (%) w/w)	Name	Ident. Numb.	Classification	Registration Number
≥75 - <100 %	dipropyleneglycol methyl ether	CAS:34590-94-8 EC:252-104-2	[1,3,OEL]	01-2119450011-60-xxxx
≥5 - <10 %	propylene carbonate	CAS:108-32-7 EC:203-572-1 Index:607-194-00-1	Eye Irrit. 2, H319	01-2119537232-48-xxxx
≥2.5 - <5 %	(z)-octadec-9-enylamine, ethoxylated	CAS:26635-93-8 EC:500-048-7	Eye Irrit. 2, H319	
≥1 - <2.5 %	Isotridecanol, ethoxylated	CAS:9043-30-5 EC:500-027-2	Acute Tox. 4, H302; Eye Dam. 1, H318	
≥0.05 - <0.1 %	1-methoxy-2-propanol	CAS:107-98-2 EC:203-539-1 Index:603-064-00-3	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119457435-35-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

Eye damages

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
dipropyleneglycol methyl ether CAS: 34590-94-8	SUVA			300	50	300	50		
	NDS			240					
	National			303	50	600	100		
	National			300	50	450	75		Short-term value, 15 minutes average value
	National			310	50				hud
	National			300	50				H
	NDSch			480					
	EU			308	50				Skin
	ACGIH				100		150		Skin - Eye and URT irr, CNS impair
	DFG	GERMANY	C			310	50		
	ACGIH				100		150		Skin - potential significant contribution to overall exposure by the cutaneous route; CNS impairment; eye and upper respiratory tract irritation
	National	SWEDEN		300	50				
	National	FRANCE		308	50				
	National	SPAIN		308	50				
	National	GREECE		600	100	900	150		
	National	DENMARK		309	50				
	National	FINLAND		310	50				

propylene carbonate CAS: 108-32-7	National GERMANY		310	50				
	National PORTUGAL		308	50			150	
	National NORWAY		300	50	375		75	
	National BELGIUM		308	50				
	NDS POLAND		240					
	NDSch POLAND				480			
	CHE SWITZERLAND				300		50	
	NDS NETHERLANDS		300					
	National CZECH REPUBLIC		270					
	National HUNGARY		308					
	Malaysi a OEL		606	100				Skin notation
	National ESTONIA		308	50				
	National LATVIA		308	50				
	National CZECH REPUBLIC	C			550			
	National SLOVAKIA		308	50				
	National SLOVENIA		308	50				
	National UNITED KINGDOM		308	50	924		150	
	National BULGARIA		308,0	50				
	National ROMANIA		308	50				
	TUR TURKEY		308	50				
	National LITHUANIA		308	50	450		75	
	National CROATIA		308	50				
	EU		308	50				Indicative Possibility of significant uptake through the skin
1-methoxy-2-propanol CAS: 107-98-2	National LATVIA		2					
	National LITHUANIA		7					
	DFG GERMANY	C			8,5		2	
	National GERMANY		8,5	2				
	SUVA		375	100	568		150	
	National SWEDEN		190	50	300		75	SWEDEN, Short-term value, 15 minutes average value
	National FINLAND		370	100	560		150	FINLAND, hud
	National NORWAY		180	50				NORWAY, H
	NDS		180					
	NDSch		360					
	National NORWAY		185	50	370		100	
	EU		375	100	563		150	Skin
	ACGIH			50			100	A4 - Eye and URT irr
	DFG GERMANY	C			740		200	
	ACGIH			50			100	A4 - Not Classifiable as a Human Carcinogen; eye and upper respiratory tract irritation
	National SWEDEN		190	50				
	National FRANCE		188	50	375		100	
	National SPAIN		375	100	568		150	
	National GREECE		360	100	1080		300	
	National DENMARK		185	50				

National FINLAND	370	100	560	150
National GERMANY	370	100		
National PORTUGAL	375	100	568	150
National BELGIUM	375	100	568	150
NDS POLAND	180			
NDSch POLAND			360	
CHE SWITZERLAND			720	200
NDS NETHERLANDS	375		563	
National CZECH REPUBLIC	270			
National HUNGARY	375		568	
Malaysi a OEL MALAYSIA	369	100		
National ESTONIA	375	100	568	150
National LATVIA	375	100	568	150
National CZECH REPUBLIC C			550	
National SLOVAKIA C			568	
National SLOVAKIA	375	100		
National SLOVENIA	375	100	562,5	150
National UNITED KINGDOM	375	100	560	150
National BULGARIA	375,0	100	568,0	150
National ROMANIA	375	100	568	150
TUR TURKEY	375	100	568	150
National LITHUANIA	190	50	300	75
National CROATIA	375	100	568	150
EU	375	100	568	150

Indicative Possibility of significant uptake through the skin

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
dipropyleneglycol methyl ether CAS: 34590-94-8	19 mg/l	Fresh Water		
	1,9 mg/l	Marine water		
	70,2 mg/kg	Freshwater sediments		
	7,02 mg/kg	Marine water sediments		
	4168 mg/l	Microorganisms in sewage treatments		
	190 mg/l	Intermittent release		
propylene carbonate CAS: 108-32-7	2,74 mg/kg	Soil		
	0,09 mg/l	Marine water		
	0,09 mg/l	Fresh Water		
	7400 mg/l	Microorganisms in sewage treatments		
1-methoxy-2-propanol CAS: 107-98-2	0,81 mg/kg	Soil		
	10 mg/l	Fresh Water		
	100 mg/l	Intermittent release		
	1 mg/l	Marine water		

100 mg/l	Microorganisms in sewage treatments
52,3 mg/kg	Freshwater sediments
5,2 mg/kg	Marine water sediments
4,59 mg/kg	Soil

Derived No Effect Level. (DNEL)

	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
dipropyleneglycol methyl ether CAS: 34590-94-8	65 mg/kg		15 mg/kg	Human Dermal	Long Term, systemic effects	
	310 mg/m3		37,2 mg/m3	Human Inhalation	Long Term, systemic effects	
			1,67 mg/kg	Human Oral	Long Term, systemic effects	
propylene carbonate CAS: 108-32-7	50 mg/kg			Human Dermal	Long Term, systemic effects	
	20 mg/m3			Human Inhalation	Long Term, local effects	
	176 mg/m3			Human Inhalation	Long Term, systemic effects	
			25 mg/kg	Human Dermal	Long Term, systemic effects	
			43,5 mg/m3	Human Inhalation	Long Term, systemic effects	
			25 mg/kg	Human Oral	Long Term, systemic effects	
			10 mg/m3	Human Inhalation	Long Term, local effects	
1-methoxy-2-propanol CAS: 107-98-2		369 mg/m3		Human Inhalation	Long Term, systemic effects	
		553,5 mg/m3		Human Inhalation	Short Term, systemic effects	
		553,5 mg/m3		Human Inhalation	Short Term, local effects	
		183 mg/kg		Human Dermal	Long Term, systemic effects	
			43,9 mg/m3	Human Inhalation	Long Term, systemic effects	
			78 mg/kg	Human Dermal	Long Term, systemic effects	
			33 mg/m3	Human Oral	Long Term, systemic effects	

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: gel

Color: transparent

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: $100\text{ }^{\circ}\text{C}$ ($212\text{ }^{\circ}\text{F}$)

Flammability: N.A.

Upper/lower flammability or explosive limits: Not available

Flash point: $75\text{ }^{\circ}\text{C}$ ($167\text{ }^{\circ}\text{F}$)

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: 7.00

pH (water dispersion, 10%): 7.00

Viscosity: Not available

Kinematic viscosity: Not available

Solubility in water: dispersible

Solubility in oil: Not available

Partition coefficient (n-octanol/water): Not available

Vapour pressure: Not available

Relative density: 1.00 g/cm^3

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the mixture:

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

dipropyleneglycol methyl ether	a) acute toxicity	LD50 Oral Rat > 5000, mg/kg
		LD50 Skin Rabbit = 9500 mg/kg
propylene carbonate	a) acute toxicity	LD50 Skin Rabbit > 2000, mg/kg
		LD50 Oral Rat > 29000, mg/kg
Isotridecanol, ethoxylated	a) acute toxicity	LD50 Oral Rat = 1000 mg/kg
1-methoxy-2-propanol	a) acute toxicity	LD50 Oral Rat = 5300 mg/kg
		LD50 Skin Rabbit = 13000 mg/kg
		LC50 Inhalation Rat = 28,8 mg/l 4h
		LD50 Skin Rabbit = 13 g/kg
		LC50 Inhalation Rat > 7559 ppm 6h
		LD50 Oral Rat = 5000 mg/kg
	h) STOT-single exposure	NOAEL Oral Rat = 919 mg/kg
		NOAEL Inhalation Rat = 3,7 mg/kg
		NOAEL Skin Rabbit > 1000 mg/kg

11.2 Information on other hazards**Endocrine disrupting properties:**

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information**12.1. Toxicity**

Biodegradability: The product is readily and rapidly degradable (biodegradation value $>60\%$, OECD 301 D).

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards

Based on available data, the classification criteria are not met

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
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dipropyleneglycol methyl ether	CAS: 34590-94-8 - EINECS: 252-104-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas > 10000 mg/L 96h a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1919 mg/L 48h IUCLID
propylene carbonate	CAS: 108-32-7 - EINECS: 203-572-1 - INDEX: 607-194-00-1	a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 1000 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 500 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus > 500 mg/L 72h IUCLID
1-methoxy-2-propanol	CAS: 107-98-2 - EINECS: 203-539-1 - INDEX: 603-064-00-3	a) Aquatic acute toxicity : LC50 Fish = 5000 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia = 23300 mg/L 48 a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 96 a) Aquatic acute toxicity : LC50 Bacteria > 1000 mg/L 3 a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 20,8 g/l 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 23300 mg/L 48h IUCLID

12.2. Persistence and degradability

Component	Persitence/Degradability:
dipropyleneglycol methyl ether	Readily biodegradable

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7 Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging 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.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID) :

ADR-Hazard identification number: NA

Not Applicable

Air (IATA) :

Not Applicable

Sea (IMDG) :

Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 40, 75

SVHC Substances:

SVHC substances not present in a concentration $\geq 0.1\%$ (w/w)

National regulations

Produktregisteret Norge: 110965

MAL-kode: 1-4 (1993)

German Water Hazard Class (WGK)

Class 1: slightly hazardous for water.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3

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

Classification according to Regulation (EC) Nr. 1272/2008

3.3/2

Classification procedure

Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

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

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration
 ECHA: European Chemicals Agency
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 ES: Exposure Scenario
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IARC: International Agency for Research on Cancer
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 IC50: half maximal inhibitory concentration
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 IMDG: International Maritime Code for Dangerous Goods.
 INCI: International Nomenclature of Cosmetic Ingredients.
 IRCCS: Scientific Institute for Research, Hospitalization and Health Care
 KAFH: KAFH
 KSt: Explosion coefficient.
 LC50: Lethal concentration, for 50 percent of test population.
 LD50: Lethal dose, for 50 percent of test population.
 LDLo: Leathal Dose Low
 N.A.: Not Applicable
 N/A: Not Applicable
 N/D: Not defined/ Not available
 NA: Not available
 NIOSH: National Institute for Occupational Safety and Health
 NOAEL: No Observed Adverse Effect Level
 OSHA: Occupational Safety and Health Administration.
 PBT: Persistent, Bioaccumulative and Toxic
 PGK: Packaging Instruction
 PNEC: Predicted No Effect Concentration.
 PSG: Passengers
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 STEL: Short Term Exposure limit.
 STOT: Specific Target Organ Toxicity.
 TLV: Threshold Limiting Value.
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
 vPvB: Very Persistent, Very Bioaccumulative.
 WGK: German Water Hazard Class.

*** Sheet model entirely changed in compliance to regulatory update.**