

Safety Data Sheet

Complies with Annex II of REACH - Regulation (EU) 2020/878

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

1.1. Product identifier

Code: 0030180
Name: POWER DET
Chemical name and synonyms: POWER DET

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

Sector of use: SU22 – Professional uses SU21 – Consumer uses
Product category: PC35 – Washing and cleaning products (including solvent-based products)
Description/Usage: Acid cleaner, descaler and degreaser for ceramic materials

1.3. Information about the supplier of the safety data sheet

Business name: MARBEC SRL
Address: VIA CROCE ROSSA 5/i
Locality and State: 51037 MONTALE (PISTOIA)
ITALY
tel. +039 0573/959848
fax:

e-mail of the competent person,

info@marbec.it

1.4. Emergency telephone number

For urgent information please contact

MARBEC srl
+390573959848 8.30am-1pm 2pm-6pm or +393348578502
Telephone number of Poison Control Centers active 24 hours a day
National Poisons Information Service (Birmingham Unit) +44 844 892 0111
IRCSS Maugeri Foundation –
Pavia 0039-0382-24444
CAV Ospedali Riuniti –
Bergamo 0039-800-883300
CAV Niguarda Ca` Granda Hospital –
Milan 0039-02-66101029
CAV Careggi Hospital - Florence 0039-055-7947819
CAV Gemelli Polyclinic –
Rome 0039-06-3054343
CAV Policlinico Umberto I –
Rome 0039-06 49978000
CAV Cardarelli Hospital –
Naples 0039-081 5453333
CAV Verona Integrated Hospital Company - Verona 800011858

SECTION 2. Hazard Identification

2.1. Substance or mixture classification

The product is classified as dangerous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet compliant with the provisions of Regulation (EU) 2020/878. Any additional information regarding risks to health and/or the environment is reported in the sections. 11 and 12 of this sheet.

Hazard classification and indications:

Skin corrosion, category 1	H314	It causes serious skin burns and serious eye injuries.
Serious eye damage, category 1	H318	Causes serious eye damage.

2.2. Label elements

Hazard labeling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

Hazard pictograms:



Warnings: Danger

Hazard Statements:

H314 It causes serious skin burns and serious eye injuries.

Precautionary advice:

P260 Do not breathe dust / fumes / gases / mist / vapors / aerosols.
P305+P351+P338 IN CASE OF CONTACT WITH EYES: rinse thoroughly for several minutes. Remove any contact lenses if it is easy to do so. Continue rinsing.
P303+P361+P353 IN CASE OF CONTACT WITH SKIN (or hair): immediately take off all contaminated clothing. Rinse your skin [or take a shower].
P280 Wear protective gloves/clothing and protect your eyes/face.
P301+P330+P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting.

Contains: Alcohols, C11-13-branched, ethoxylated (>2.5 mol EO)

2.3 Ingredients compliant with Regulation (EC) No. 648/2004

Aliphatic hydrocarbons <1%, non-ionic surfactants 5%<C<15%, anionic surfactants <5%

2.3. Other dangers

Based on available data, the product does not contain PBT or vPvB substances in percentages $\geq 0.1\%$.

The product does not contain substances with properties that interfere with the endocrine system in concentrations $\geq 0.1\%$.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
DIPROPYLENE GLYCOL MONOMETHYL ETHER CAS 34590-94-8 CE 252-104-2 INDEX - REACH Reg. 01-2119450011-60-xxxx	9 ≤ x < 30	Substance with a community workplace exposure limit.
Dimethyl-2-methyl glutarate CAS 14035-94-0 THERE IS INDEX - REACH Reg. 01-0000017895-56	3 ≤ x < 9	
1-METHYL-2-METHOXYETHYL ACETATE CAS 108-65-6 CE 203-603-9 INDEX 607-195-00-7 REACH Reg. 01-2119475791-29-xxxx	3 ≤ x < 9	Flam. Liq. 3 H226
SULFAMMIC ACID CAS 5329-14-6 CE 226-218-8 INDEX 016-026-00-0 REACH Reg. 01-2119488633-28-xxxx	3 ≤ x < 9	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Aquatic Chronic 3 H412
Alcohols, C11-13-branched, ethoxylated (>2.5 mol EO) CAS 68439-54-3 THERE IS INDEX -	3 ≤ x < 9	Acute Tox. 4 H302, Eye Dam. 1 H318 LD50 Oral: >300 mg/kg
BENZYL ALCOHOL CAS 100-51-6 CE 202-859-9 INDEX 603-057-00-5 REACH Reg. 01-2119492630-38-xxxx	3 ≤ x < 9	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319 LD50 Oral: 1620 mg/kg, ATE Vapor inhalation: 11 mg/l
SULFONIC ACIDS, C14-17-SEC-ALKANES, SODIUM SALTS CAS 97489-15-1 CE 307-055-2 INDEX -	1 ≤ x < 3	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Chronic 3 H412 LD50 Oral: >1000 mg/kg

REACH Reg. 01-2119489924-20

Alcohols, branched C12-15 and linear, ethoxylated propoxylated

CAS 120313-48-6

$1 \leq x < 3$

Eye Irrit. 2 H319, Skin Irrit. 2 H315

THERE IS

INDEX -

REACH Reg. (REF.:N° 02-2119548508-30-0000

The complete text of the hazard indications (H) is shown in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and abundantly with water for at least 15 minutes, opening the eyelids wide. Consult a doctor if the problem persists.

SKIN: Take off contaminated clothing. Shower immediately. Wash the contaminated garments before reusing them.

INHALATION: Move the subject to fresh air. If breathing stops, give artificial respiration. Call a doctor immediately.

INGESTION: Call a doctor immediately. Do not induce vomiting. Do not administer anything that is not expressly authorized by your doctor.

4.2. Main symptoms and effects, both acute and delayed

There is no specific information on the symptoms and effects caused by the product.

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

Information not available

SECTION 5. Fire fighting measures

5.1. Fire fighting

SUITABLE EXTINGUISHING MEANS

Choose the most appropriate extinguishing media for the specific situation.

UNSUITABLE EXTINGUISHING MEANS

No one in particular.

5.2. Special hazards arising from the substance or mixture

DANGERS DUE TO EXPOSURE IN THE EVENT OF FIRE

The product is not flammable or combustible.

5.3. Recommendations for fire fighters

EQUIPMENT

Normal fire-fighting clothing, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and fire fighter boots (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop the leak if there is no danger.

Wear appropriate protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid both for workers and for emergency interventions.

6.2. Environmental precautions

Prevent the product from entering sewers, surface waters and groundwater.

6.3. Methods and materials for containment and cleanup

Suck up the spilled product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material.

Provide sufficient ventilation of the area affected by the leak. Disposal of contaminated material must be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal is reported in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for Safe Handling

Handle the product after consulting all other sections of this safety data sheet. Avoid dispersing the product into the environment. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Keep containers closed, in a well-ventilated place, away from direct sunlight. Store containers away from any incompatible materials, checking section 10.

Storage class TRGS 510 (Germany):

12

7.3. Specific end uses

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Normative requirements:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
EXP	Spain	Professional exposure limits for chemical agents in Spain 2021
BETWEEN	France	Value limits of professional exposure to chemical agents in France. ED 984 - INRS
ITA	Italy	Legislative Decree 9 April 2008, n.81
PRT	Portugal	Decree-Lei n.º 1/2021 of 6 January, indicative professional exposure limit values for chemical agents. Legislative Decree no. 35/2020 of 13 July, protection of workers against risks linked to exposure during

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GBR United Kingdom
 EU OEL EU

work with cancerous or mutagenic agents
 EH40/2005 Workplace exposure limits (Fourth Edition 2020)
 Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398;
 Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive
 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Threshold limit value

Guy	State	TWA/8h		STEL/15min		Notes / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	310	50	310	50	
MAK	DEU	310	50	310	50	
VLA	EXP	308	50			SKIN
VLEP	BETWEEN	308	50			SKIN
VLEP	ITA	308	50			SKIN
VLE	PRT	308	50			SKIN
WEL	GBR	308	50			SKIN
OEL	EU	308	50			SKIN

SULFAMMIC ACID

Predicted no-effect concentration on the environment - PNEC

Reference value in fresh water	0.048	mg/l
Reference value in sea water	0.0048	mg/l
Reference value for sediments in fresh water	0.173	mg/kg/d
Reference value for sediments in sea water	0.0173	mg/kg/d
Reference value for the terrestrial compartment	0.00638	mg/kg/d

Health - Derived no effect level - DNEL / DMEL

Exhibition Street	Effects on consumers			Effects on workers				
	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral				1.06 mg/kg bw/d				
Dermal				5 mg/kg bw/d				10 mg/kg bw/d

1-METHYL-2-METHOXYETHYL ACETATE

Threshold limit value

Guy	State	TWA/8h		STEL/15min		Notes / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	EXP	275	50	550	100	SKIN
VLEP	BETWEEN	275	50	550	100	SKIN
VLEP	ITA	275	50	550	100	SKIN
VLE	PRT	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	SKIN
OEL	EU	275	50	550	100	SKIN

Predicted no-effect concentration on the environment - PNEC

Reference value in fresh water	0.635	mg/l
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Replaces revision:7 (Revision date: 01/28/2022)

Reference value in sea water	0.0635	mg/l
Reference value for sediments in fresh water	3.29	mg/kg
Reference value for sediments in sea water	0.329	mg/kg
Reference value for water, intermittent release	6.35	mg/l
Reference value for STP microorganisms	100	mg/l
Reference value for the terrestrial compartment	0.29	mg/kg

Health - Derived no effect level - DNEL / DMEL

Exhibition Street	Effects on consumers				Effects on workers			
	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral				1.67 mg/kg/d				
Inhalation				33 mg/m3				275 mg/m3
Dermal				54.8 mg/kg/d				153.5 mg/kg/d

BENZYL ALCOHOL

Threshold limit value

Guy	State	TWA/8h	STEL/15min	Notes / Observations
		mg/m3	ppm	
AGW	DEU	22	5	44
				10
				SKIN
				11

Predicted no-effect concentration on the environment - PNEC

Reference value in fresh water	1	mg/l
Reference value in sea water	0.1	mg/l
Reference value for sediments in fresh water	5.27	mg/kg
Reference value for sediments in sea water	0.527	mg/kg
Reference value for water, intermittent release	2,3	mg/l
Reference value for STP microorganisms	39	mg/l
Reference value for the terrestrial compartment	0.45	mg/kg/d

Health - Derived no effect level - DNEL / DMEL

Exhibition Street	Effects on consumers				Effects on workers			
	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic
Oral		20 mg/kg bw/d		4 mg/kg bw/d				
Inhalation		27 mg/m3		5.4 mg/m3		110 mg/m3		22 mg/m3
Dermal		20 mg/kg bw/d		4 mg/kg bw/d		40 mg/kg bw/d		8 mg/kg bw/d

SULFONIC ACIDS, C14-17-SEC-ALKANES, SODIUM SALTS

Predicted no-effect concentration on the environment - PNEC

Reference value in fresh water	0.04	mg/l
Reference value in sea water	0.004	mg/l
Reference value for sediments in sea water	0.94	mg/kg
Reference value for water, intermittent release	0.06	mg/l
Reference value for STP microorganisms	600	mg/l
Reference value for the terrestrial compartment	9.4	mg/kg

Health - Derived no effect level - DNEL / DMEL

Exhibition Street	Effects on consumers				Effects on workers			
	Acute rooms	Acute systemic	Chronic premises	Chronic systemic	Acute rooms	Acute systemic	Chronic premises	Chronic systemic

Oral			VND	7.1 mg/kg bw/d				
Inhalation			VND	12.34 mg/m3			VND	35 mg/m3
Dermal	2.8 mg/cm2	VND	2.8 mg/cm2	3.57 mg/kg bw/d	2.8 mg/cm2	VND	2.8 mg/cm2	5 mg/kg bw/d

Legend:

(C) = CEILING ; INALAB = Inhalable Fraction; RESPIR = Respirable Fraction; TORAC = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available; NEA = no expected exposure; NPI = no hazard identified.

8.2. Exposure controls

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local extraction.

When choosing personal protective equipment, ask your chemical suppliers for advice if necessary.

Personal protective equipment must bear the CE marking which certifies their compliance with current regulations.

Provide emergency shower with eyecup.

HAND PROTECTION

Protect your hands with category III work gloves (ref. standard EN 374).

For the final choice of work glove material, the following must be considered: compatibility, degradation, breaking time and permeation.

In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is unpredictable. The gloves have a wear time that depends on the duration and method of use.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional category III use (ref. Regulation 2016/425 and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

EYE PROTECTION

It is advisable to wear a hooded visor or protective visor combined with airtight glasses (ref. standard EN 166).

RESPIRATORY PROTECTION

Not necessary for normal use. If the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances present in the product is exceeded, it is recommended to wear a mask with a type A filter whose class (1, 2 or 3) must be chosen in relation to the limit concentration of use. (ref. standard EN 14387). If gases or vapors of a different nature and/or gases or vapors with particles (aerosols, fumes, mists, etc.) are present, combined filters must be provided.

The use of respiratory protection means is necessary if the technical measures adopted are not sufficient to limit the worker's exposure to the threshold values taken into consideration. However, the protection offered by masks is limited.

In the event that the substance considered is odorless or its olfactory threshold is higher than the relevant TLV-TWA and in case of emergency, wear an open-circuit compressed air breathing apparatus (ref. standard EN 137) or a self-contained breathing apparatus external air (ref. EN 138 standard). For the correct choice of respiratory protection device, refer to the EN 529 standard.

ENVIRONMENTAL EXPOSURE CONTROLS

Emissions from production processes, including those from ventilation equipment, should be controlled for compliance with environmental protection legislation.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Property	Value	Information
Physical State	liquid	
Color	colorless to amber	

Odor	characteristic
Melting or freezing point	Not applicable
Initial boiling point	Not applicable
Boiling range	Not applicable
Flammability	incombustible
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Flash point	> 60 °C
Auto-ignition temperature	Not applicable
pH	1-2
Kinematic viscosity	Not available
Solubility	partially soluble in water
Partition coefficient: n-octanol/water	Not available
Vapor pressure	Not available
Density and/or Relative density	1.05 kg/l
Relative vapor density	Not available
Characteristics of the particles	Not applicable

9.2. More information

9.2.1. Information regarding physical hazard classes

Information not available

9.2.2. Other safety features

VOC (Directive 2010/75/EU)	28.57% - 300.00 g/litre
Explosive properties	not explosive
Oxidizing properties	non-oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular dangers of reaction with other substances under normal conditions of use.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of dangerous reactions

Under normal conditions of use and storage, dangerous reactions are not foreseeable.

10.4. Conditions to avoid

None in particular. However, follow the usual precautions regarding chemical products.

10.5. Incompatible materials

SULFAMMIC ACID

Incompatible with: chlorine, nitric acid, nitrates, sodium nitrite, potassium nitrite.

BENZYL ALCOHOL

Incompatible with: sulfuric acid, oxidizing substances, aluminium.

10.6. Hazardous decomposition products**SULFAMMIC ACID**

May develop: sulfur oxides, nitrogen oxides.

SECTION 11. Toxicological information**11.1. Information on the hazard classes defined in Regulation (EC) no. 1272/2008**Metabolism, kinetics, mechanism of action and other information**1-METHYL-2-METHOXYETHYL ACETATE**

The main route of entry is the skin, while the respiratory route is less important, given the low vapor pressure of the product.

Information on likely routes of exposure**1-METHYL-2-METHOXYETHYL ACETATE**

WORKERS: inhalation; contact with the skin.

Immediate, delayed and chronic effects resulting from short- and long-term exposures**1-METHYL-2-METHOXYETHYL ACETATE**

Above 100 ppm there is irritation of the ocular, nasal and oropharyngeal mucous membranes. At 1000 ppm, balance disturbances and severe eye irritation are noted. The clinical and biological tests carried out on the exposed volunteers revealed no anomalies. Acetate produces greater skin and eye irritation upon direct contact. No chronic effects on humans are reported (INCR, 2010).

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - vapours) of the mixture: > 20 mg/l
ATE (Oral) of the mixture: >2000 mg/kg
ATE (Dermal) of the mixture: Not classified (no relevant component)

Dimethyl-2-methyl glutarate

LD50 (Dermal): > 2000 mg/kg rat
LC50 (Vapour inhalation): > 5.6 mg/l/4h rat

SULFAMMIC ACID

LD50 (Dermal): > 2000 mg/kg rat
LD50 (Oral): 3160 mg/kg Rat

1-METHYL-2-METHOXYETHYL ACETATE

LD50 (Dermal): > 5000 mg/kg Rat
LD50 (Oral): 8530 mg/kg Rat

Ethoxylated aliphatic alcohol 7 moles

LD50 (Dermal): > 2000 mg/kg rabbit
LD50 (Oral): > 300 mg/kg rat

BENZYL ALCOHOL

LD50 (Dermal): 2000 mg/kg Rabbit
LD50 (Oral): 1620 mg/kg Rat
LC50 (Vapour inhalation): > 4178 mg/l/4h Rat
STA (Vapour inhalation): 11 mg/l estimated from table 3.1.2 of Annex I of CLP
(data used to calculate the estimate of the acute toxicity of the mixture)

SULFONIC ACIDS, C14-17-SEC-ALKANES, SODIUM SALTS

LD50 (Dermal): 2000 mg/kg mouse
LD50 (Oral): > 1000 mg/kg rat

Alcohols, branched C12-15 and linear, ethoxylated propoxylated

LD50 (Oral): > 2000 mg/kg rat

SKIN CORROSION / SKIN IRRITATION

Corrosive to the skin

SERIOUS EYE DAMAGE / EYE IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITIZATION

It does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

MUTAGENICITY ON GERM CELLS

It does not meet the classification criteria for this hazard class

CARCINOGENICITY

It does not meet the classification criteria for this hazard class

REPRODUCTION TOXICITY

It does not meet the classification criteria for this hazard class

Harmful effects on sexual function and fertility

Information not available

Harmful effects on the development of offspring

Information not available

Effects on or through breastfeeding

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

It does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

It does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

DANGER IN CASE OF ASPIRATION

It does not meet the classification criteria for this hazard class

11.2. Information about other hazards

Based on available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with effects on human health being evaluated.

SECTION 12. Ecological information

12.1. Toxicity

1-METHYL-2-METHOXYETHYL ACETATE

Assessment of aquatic toxicity: the product is most likely not harmful to aquatic organisms. The correct introduction of low concentrations into a biological purification plant should not compromise the degradation activity of the activated sludge. Acute aquatic toxicity: based on acute aquatic toxicity values; not classified. Chronic aquatic toxicity: Not classified, based on ready biodegradability and low acute toxicity.

SULFAMMIC ACID

LC50 - Pisces 703 mg/l/96h *Pimephales promelas*

EC50 - Crustaceans 71.6 mg/l/48h *daphnia magna*

1-METHYL-2-METHOXYETHYL ACETATE

LC50 - Pisces 134 mg/l/96h *oncorhynchus mykiss*

EC50 - Crustaceans > 500 mg/l/48h *daphnia magna*

EC50 - Algae / Aquatic Plants > 1000 mg/l/72h *selenastrum capricornutum*

Chronic NOEC Fish 47.5 mg/l *oryzias latipes*

Chronic NOEC Crustaceans > 100 mg/l *daphnia magna*

BENZYL ALCOHOL

LC50 - Pisces 460 mg/l/96h *Pimephales promelas*

EC50 - Crustaceans 230 mg/l/48h *daphnia magna*

EC50 - Algae / Aquatic Plants 770 mg/l/72h *Pseudokirchneriella subcapitata*

Ethoxylated aliphatic alcohol 7 moles

LC50 - Pisces 5 mg/l/96h

EC50 - Crustaceans 5 mg/l/48h

EC50 - Algae / Aquatic Plants 5 mg/l/72h

Chronic NOEC Algae / Aquatic Plants 10 mg/kg OECD 208 method

Dimethyl-2-methyl glutarate

LC50 - Pisces 56 mg/l/96h *Oncorhynchus mykiss*

EC50 - Crustaceans > 100 mg/l/48h *Daphnia magna*

EC50 - Algae / Aquatic Plants > 60 mg/l/72h *Pseudokirchneriella subcapitata*

Alcohols, branched C12-15 and linear, ethoxylated propoxylated

LC50 - Pisces 5 mg/l/96h

SULFONIC ACIDS, C14-17-SEC-ALKANES, SODIUM SALTS

LC50 - Pisces 5 mg/l/96h *Brachydanio rerio*

EC50 - Crustaceans 9.81 mg/l/48h *Daphnia magna*

Chronic NOEC Fish 0.85 mg/l *Oncorhynchus mykiss*

Chronic NOEC Crustaceans > 61 mg/l *Scenedesmus subspicatus*

12.2. Persistence and degradability

SULFAMMIC ACID

Solubility in water > 10000 mg/l

Degradability: data not available

DIPROPYLENE GLYCOL MONOMETHYL
ETHER

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

1-METHYL-2-METHOXYETHYL ACETATE

Solubility in water > 10000 mg/l

Rapidly degradable

BENZYL ALCOHOL

Rapidly degradable

Ethoxylated aliphatic alcohol 7 moles

Rapidly degradable

Dimethyl-2-methyl glutarate

Rapidly degradable

Alcohols, branched C12-15 and linear,
ethoxylated propoxylated

Rapidly degradable

SULFONIC ACIDS, C14-17-SEC-ALKANES,
SODIUM SALTS

Rapidly degradable

12.3. Bioaccumulative potentialDIPROPYLENE GLYCOL MONOMETHYL
ETHER

Partition coefficient: n-octanol/water 0.0043

1-METHYL-2-METHOXYETHYL ACETATE

Partition coefficient: n-octanol/water 1,2

BENZYL ALCOHOL

Partition coefficient: n-octanol/water 1.1

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

Based on available data, the product does not contain PBT or vPvB substances in percentages $\geq 0.1\%$.

12.6. Endocrine disrupting properties

Based on available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with effects on the environment being evaluated.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal Considerations**13.1. Waste treatment methods**

Reuse if possible. Product residues are to be considered hazardous special waste. The dangerousness of waste that partly contains this product must be assessed based on current legislative provisions.

Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transportation Information

The product is not to be considered dangerous pursuant to the provisions in force regarding the transport of dangerous goods by road (ADR), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1. UN number or ID number

Not applicable

14.2. Official UN shipping name

Not applicable

14.3. Transport hazard classes

Not applicable

14.4. Packing group

Not applicable

14.5. Dangers for the environment

Not applicable

14.6. Special precautions for users

Not applicable

14.7. Maritime transport in bulk in accordance with IMO acts

Information not relevant

SECTION 15. Regulatory information

15.1. Health, safety and environmental laws and regulations specific for the substance or mixture

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or substances contained according to Annex XVII Regulation (EC) 1907/2006

<u>Product</u>	
Point	3 - 40

Substances contained

Point	75
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Regulation (EU) 2019/1148 - relating to the placing on the market and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

Based on available data, the product does not contain SVHC substances in percentages $\geq 0.1\%$.

Substances subject to authorization (Annex XIV REACH)

None

Substances subject to export notification requirements Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Sanitary checks

Workers exposed to this chemical agent dangerous to health must be subjected to health surveillance carried out in accordance with the provisions of the art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2. Chemical safety assessment

A chemical safety assessment has been developed for the following substances contained in the mixture:

Sulphamic acid, 1-methyl-2-methoxyethyl acetate, Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics, Benzyl alcohol, Sulfonic acids, C14-17-sec-alkanes, Sodium salts.

SECTION 16. Other information

Text of the hazard statements (H) mentioned in sections 2-3 of the sheet:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1	Skin corrosion, category 1
Eye Dam. 1	Serious eye damage, category 1
Skin Irrit. 2	Skin irritation, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H302	Harmful if ingested.
H332	Harmful if inhaled.
H314	It causes serious skin burns and serious eye injuries.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H412	Harmful to aquatic organisms with long lasting effects.

LEGEND:

- ADR: European Agreement for the transport of dangerous goods by road
- CAS: Chemical Abstract Service Number
- CE: Identification number in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived no-effect level
- EC50: Concentration that gives effect to 50% of the population subject to testing
- EmS: Emergency Schedule
- GHS: Globally Harmonized System for the Classification and Labeling of Chemical Products
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the population subject to testing
- IMDG: International Maritime Code for the Transport of Dangerous Goods
- IMO: International Maritime Organization

- INDEX: Identification number in Annex VI of CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable no-effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- STA: Acute Toxicity Estimate
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of occupational exposure.
- TWA: Weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to REACH
- WGK: Aquatic hazard class (Germany).

GENERAL BIBLIOGRAPHY:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
 2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
 3. Regulation (EU) 2020/878 (Annex II of the REACH Regulation)
 4. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
 5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
 6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
 7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
 8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
 9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
 10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
 11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (EU) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (EU) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (EU) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (EU) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (EU) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - NI Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA Agency website
 - Database of SDS models of chemical substances - Ministry of Health and Istituto Superiore di Sanità

Note for the user:

The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force regarding hygiene and safety under his own responsibility. We do not assume responsibility for improper use.

Provide adequate training to personnel assigned to the use of chemical products.

CLASSIFICATION CALCULATION METHODS

Chemical-physical hazards: The classification of the product was derived from the criteria established by the CLP Regulation Annex I Part 2. The methods of evaluation of the chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on the calculation methods in Annex I of CLP Part 3, unless otherwise indicated in section 11.

Environmental hazards: The classification of the product is based on the calculation methods set out in Annex I of CLP Part 4, unless otherwise indicated in section 12.

MARBEC SRL

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Changes compared to the previous revision
Changes have been made to the following sections:
02 / 03 / 11 / 12.