

Safety Data Sheet Safety

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: 0030385
Naming: ACTIV 3
Chemical name and synonyms: ACTIV 3

1.2. Identified relevant uses of the substance or mixture and uses not recommended

Area of use: SU22 - Professional uses SU21 - Uses of consumption

Uses not recommended. Avoid use: involving spray applications (airless) without the aid of PPE.

Description/Use: protective hydro-oil repellent solvent base for absorbent stone materials

1.3. Safety data sheet supplier information

Company name: MARBEC S.R.L.
Address: VIA CROCE ROSSA 5/i
Location and State: 51037 MONTALE (PISTOIA)
ITALY
tel. +039 0573/959848
fax:

e-mail of the competent person,
responsible for the safety data sheet

info@marbec.it

1.4. Emergency telephone number

For urgent information please contact

MARBEC srl
0573959848 h8.30-13 h14-18 o 3357267921
Telephone number of Poison Control Centres active 24/24 hours
IRCSS Fondazione Maugeri -
Pavia 0039-0382-24444
CAV Ospedali Riuniti -
Bergamo 0039-800-883300
CAV Niguarda Hospital Ca` Granda -
Milan 0039-02-66101029
CAV Hospital Careggi- Florence 0039-055-7947819
CAV Policlinico Gemelli -
Rome 0039-06-3054343
CAV Policlinico Umberto I -
Rome 0039-06 49978000
CAV Hospital Cardarelli -
Naples 0039-081 5453333
CAV Azienda Ospedaliera Integrata Verona - Verona 800011858

SECTION 2. Hazard identification

2.1. Classification of the substance or mixture

The product is classified as dangerous according to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet that complies with the provisions of Regulation (EU) 2020/878. Any additional information concerning the risks to health and/or the environment can be found in Sections 11 and 12 of this Fact Sheet. Â Â.

Classification and hazard statements:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Specific target organ toxicity - Single exposure, category 3	H336	May cause drowsiness or dizziness. Flammable liquid and vapour.

2.2. Elements of the label

Hazard labelling according to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

Pictograms of danger:



Warning:

Danger

Hazard statements:

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P331	Do NOT induce vomiting.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER / doctor / . . .

Contains: n-butyl acetate

Product not intended for the purposes of Directive 2004/42/EC.

2.3. Other dangers

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

Contains:

Identifying	x = Conc. %	Classificazione 1272/2008 (CLP)
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"		
CAS - CE 919-857-5 INDEX - Reg. REACH 01-2119463258-33	50 ≤ x < 100	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066 Asp. Tox. 1 H304: ≥ 1%
N-BUTYL ACETATE		
CAS 123-86-4 CE 204-658-1 INDEX 607-025-00-1 Reg. REACH 01-2119485493-29	10 ≤ x < 20	Flam. Liq. 3 H226, STOT SE 3 H336, EUH066
Adipated bis(2-ethylhexyl)		
CAS 103-23-1 CE 203-090-1 INDEX - Reg. REACH 01-2119439699-19- xxxx	1 ≤ x < 3	
METHANOL		
CAS 67-56-1 CE 200-659-6 INDEX 603-001-00-X	0 ≤ x < 0,2	Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370 STOT SE 2 H371: ≥ 3% Oral STA: 100 mg/kg, STA Cutanea: 300 mg/kg, STA Inhalation vapours: 3 mg/l, STA Inhalation of mists/powders: 0.501 mg/l
2-ethylanthraquinone		
CAS 84-51-5 CE 201-535-4 INDEX -	0 < x < 0,005	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336, EUH066

The full text of the hazard statements (H) is given in Section 16 of the hazard statement.

NOTE: Dearomatized white spirit present in this product is a complex UVCB (PrC3), CAS n.a., EC 919-857-5, No. INDEX: n.a. ("C9-C11 hydrocarbons, n-alkanes, isoalkanes, cyclic, <2% aromatic" A complex and variable combination of paraffinic, cyclic and aromatic hydrocarbons, having carbon numbers predominantly in the range of C9 to C11 and boiling in the range of 130,0 °C - 210 °C). Some manufacturers provide the following related CAS: 64742-48-9.

Applicable Note P of Annex 1. Benzene concentration < 0,1 & by weight.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Wash immediately and abundantly with water for at least 15 minutes. If present, remove contact lenses if the situation allows you to do so with ease. Continue to rinse. Consult a doctor immediately.

SKIN: wash immediately and abundantly with soap and water. Take off your contaminated clothes. In case of irritation, swelling or redness, consult a specialist doctor. Wash contaminated clothing before re-use. For thermal burns, cool the injured part. Keep the burned part under cold running water for at least five minutes or until the pain disappears. Avoid a general hypothermia. When using high pressure equipment, a product injection can occur even without apparent external injuries. In this case, transfer the injured person to the hospital immediately. Do not wait for symptoms to appear.

INHALATION: In case of difficult breathing, bring the victim to the open air and keep him in a comfortable position for breathing. If the victim is unconscious and not breathing, check that there are no obstacles to breathing and practice artificial respiration by specialized personnel. If necessary, carry out external heart massage and consult a doctor. If the victim breathes, keep him in a safe lateral position. Administer oxygen if necessary.

INGESTION: do not cause vomiting to avoid the risk of aspiration. Transport the injured person to hospital immediately. Do not wait for symptoms to appear. In case of spontaneous vomiting, keep your head down to avoid the risk of aspiration of vomiting into the lungs.

4.2. Main symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product is not known.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Eye contact can cause irritation.

Contact with skin: redness. Repeated exposure can cause skin dryness or cracking.

Inhalation: headache, dizziness, drowsiness, nausea and other effects on the central nervous system.

Ingestion: Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. It can cause depression in the central nervous system. If ingested, the material can be aspirated into the lungs and cause chemical pneumonia.

4.3. Indication of the need for immediate medical and special treatment

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

If ingested accidentally the product can enter the lungs because of its low viscosity and provoke the rapid development of serious lung injuries (keep under medical supervision for 48 hours).

Notes for doctor: Treat symptomatically.

SECTION 5. Firefighting measures

5.1. Means of extinction

SUITABLE EXTINGUISHING MEDIA

The means of extinction are: carbon dioxide, foam, chemical powder. For losses and spills of the product that have not ignited, the water spray can be used to disperse flammable vapors and protect people engaged in stopping the leak.

UNSUITABLE EXTINGUISHING MEDIA

Do not use water jets. Water is not effective to extinguish the fire, but it can be used to cool closed containers exposed to the flame, preventing bursts and explosions.

5.2. Special hazards arising from the substance or mixture

FIRE EXPOSURE HAZARDS

Overpressure can be created in containers exposed to fire with danger of explosion. Avoid breathing combustion products.

5.3. Recommendations for fire extinguishers

GENERAL INFORMATION

Cool the containers with water jets to avoid the decomposition of the product and the development of substances potentially dangerous for health. Always wear the complete fire protection equipment. Collect quenching water that should not be discharged into the sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.

EQUIPMENT

Normal firefighting clothing, such as an open circuit compressed air breathing apparatus (EN 137), complete flame retardant (EN469), flame retardant gloves (EN 659) and firefighters' 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.

To drive away people who aren't equipped. Use an explosion-proof equipment. Remove any sources of ignition (cigarettes, flames, sparks, etc.) or heat from the area where the leak occurred.

6.2. Environmental precautions

Prevent the product from entering sewers, surface water, groundwater.

6.3. Methods and materials for containment and remediation

Vacuum the spilled product into a suitable container. Assess the compatibility of the vessel to be used with the product by checking Section 10.

Absorb the remaining with inert absorbent material.

Ensure sufficient ventilation of the place affected by the loss. Disposal of contaminated material shall be carried out in accordance with point 13.

6.4. Reference to other sections

Information on personal protection and disposal is given in Sections 8 and 13.

SECTION 7. Handling and storage**7.1. Precautions for safe handling**

Keep away from heat, sparks and open flames, do not smoke or use matches or lighters. Without adequate ventilation, the vapors can accumulate on the ground and ignite even at a distance, if triggered, with the danger of backfiring. Avoid accumulation of electrostatic charges. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering the eating areas. Avoid dispersion of the product into the environment.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Use appropriate personal protective equipment if necessary. Avoid contact with skin and eyes. Do not swallow. Avoid breathing the vapors. Do not release into the environment. Ensure that adequate cleaning measures (housekeeping) are taken. Contaminated material must not accumulate in the workplace and must never be kept in the pocket. Keep away from food and drink. Do not eat, drink or smoke while using the product. Wash hands thoroughly after handling. Do not reuse contaminated clothing.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool, well-ventilated place, away from heat sources, open flames, sparks and other sources of ignition. Keep containers away from incompatible materials by checking section 10.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Keep away from strong oxidants and reducing agents.

Keep away from food, drink and feed.

The structure of the storage area, the characteristics of the tanks, the equipment and the operating procedures shall comply with the relevant European, national or local legislation. Storage facilities shall be equipped with systems to prevent contamination of soil and water in the event of leakage or spillage. The cleaning, inspection and maintenance of the internal structure of storage tanks must be carried out by qualified and properly equipped personnel, as established by national, local or company regulations. Before entering the storage tanks and starting any type of intervention in a confined space, carry out appropriate remediation, check the atmosphere and verify the oxygen content and the degree of flammability. Keep separate from oxidizing agents.

Suitable materials: use mild steel or stainless steel for containers and coatings. For the realization of containers or interior coatings use approved material suitable for the use of the product. Some synthetic materials may not be suitable for containers or coatings based on material characteristics and intended uses. Check the compatibility of materials at the manufacturer in relation to the conditions of use. If the product is supplied in containers, store only in the original container or in a container suitable for the type of product. Store containers carefully closed and properly labelled. Empty containers may contain flammable product residues, which may cause a fire or explosion hazard. Open slowly to control any pressure release. Do not weld, braze, perforate, cut or incinerate empty containers unless they have been properly reclaimed.

Storage class TRGS 510 (Germany):

3

7.3. Special end-uses

Information not available

SECTION 8. Exposure/personal protection controls

8.1. Control parameters

References to the Regulations:

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
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italy	Legislative Decree 9 April 2008, n.81
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	TLV-ACGIH RCP TLV	ACGIH 2021 ACGIH TLVs and BEIs – Appendix H

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Threshold value

Type	State	TWA/8h		STEL/15min		Notes/ Remarks
		mg/m3	ppm	mg/m3	ppm	
RCP TLV		1200	197			
Expected concentration of no effect on the environment - PNEC						
Reference value in fresh water				NPI		
Reference value in sea water				NPI		
Reference value for freshwater sediments				NPI		

Oral	1,3 mg/kg bw/d	
Inhalation	4,4 mg/m ³	17,8 mg/m ³
Dermal	13 mg/kg bw/d	25,5 mg/kg bw/d

METHANOL**Threshold value**

Type	State	TWA/8h		STEL/15min		Notes/ Remarks
		mg/m ³	ppm	mg/m ³	ppm	
AGW	DEU	270	200	1080	800	SKIN
MAK	DEU	130	100	260	200	SKIN
VLA	ESP	266	200			SKIN
VLEP	FRA	260	200	1300	1000	SKIN 11
VLEP	ITA	260	200			SKIN
VLE	PRT	260	200			SKIN
WEL	GBR	266	200	333	250	SKIN
OEL	EU	260	200			
TLV-ACGIH		262	200	328	250	SKIN

Legend:

(C) = CEILING ; INALAB = Fraction Inalabile ; RESPIR = Breathing fraction ; THORAX = Thoracic fraction.

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

8.2. Exposure control

Since the use of appropriate technical measures should always take priority over personal protective equipment, ensuring good ventilation in the workplace through effective local aspiration.

If you wish to choose personal protective equipment, ask your chemical suppliers for advice.

Personal protective equipment must bear the CE marking certifying that it complies with the rules in force.

PROTECTION OF THE HANDS

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

Compatibility, degradation, breaking time and permeation must be considered when choosing the material of work gloves. In the case of preparations, the resistance of work gloves to chemical agents must be checked before use because it is not foreseeable. Gloves have a wear time that depends on the duration and mode of use.

Materials presumably suitable for gloves: nitrile, PVC or PVA (polyvinylalcohol) with a chemical protection index of at least 5 (permeation time > 240 minutes). Use gloves in accordance with the conditions and limits set by the manufacturer. In this case, refer to UNI EN 374. Gloves must be periodically inspected and replaced in the event of wear, perforation or contamination.

SKIN PROTECTION: Wear work clothes with long sleeves and safety footwear for professional use of category I (ref. Directive 89/686/EEC and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

Consider providing antistatic clothing if the working environment presents a risk of explosiveness.

When handling the product, use antistatic work clothes with long sleeves, in relation to the risks related to the classification of work areas, if necessary, heat-resistant and thermally insulated.

If clothing is contaminated, replace and clean immediately.

To assess the desirability of providing antistatic clothing in the event of an explosive working environment.

EYE PROTECTION

It is advisable to wear hermetic protective glasses (ref. EN 166).

RESPIRATORY PROTECTION

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 Type A filter mask whose class (1, 2 or 3) should be chosen in relation to the limit concentration of use. (ref. standard EN 14387). If there are gases or vapours of a different nature and/or gases or vapours with particles (aerosols, fumes, mists, etc.) combined filters shall be provided.

The use of respiratory protective equipment is necessary if the technical measures taken are not sufficient to limit the worker's exposure to the threshold values considered. The protection offered by masks is however limited.

In case 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. EN 137) or an external air intake respirator (ref. EN 138). For the correct choice of respiratory protection device, refer to EN 529.

Activities with large dispersion that lead to a probable consistent release of aerosols (e.g. use with airless spray application) are reserved for EXCLUSIVE PROFESSIONAL USE. Use additional protective measures: use an approved air-powered respirator operating at positive pressure. Air-powered respirators with an exhaust bottle may be appropriate when oxygen levels are inadequate, if the risks of gases/vapours are low, and if the capacity/values of air purification filters may be exceeded. For high airborne concentrations, also use waterproof clothing to protect the skin and protect the face.

ENVIRONMENTAL EXPOSURE CONTROLS.

Emissions from production processes, including those from ventilation equipment, should be controlled in order to comply with environmental legislation. Do not release into the environment. Storage facilities shall be equipped with systems to prevent contamination of soil and water in the event of leakage or spillage. Prevent the release of undissolved substances or recover them from wastewater. Do not distribute sludge generated by industrial water treatment on natural soils. Sludge generated by industrial water treatment must be incinerated, kept under containment or treated.

Other information. Minimise exposure to mists/vapours/aerosols. Before entering the storage tanks and starting any type of intervention in a confined space, carry out appropriate remediation, check the atmosphere and verify the oxygen content and the degree of flammability.

SECTION 9. Physical and chemical properties**9.1. Information on key physical and chemical properties**

Ownership	Valor	Information
Appearance	liquid	
Color	colorless	
Odor	characteristic	
Melting or freezing point	Unavailable	
Initial boiling point	165 °C	
Flammability	Unavailable	
Lower explosive limit	Unavailable	
Upper explosive limit	Unavailable	
Flash point	23≤T≤60 °C	
Self-ignition temperature	Unavailable	
pH	Unenforceable	Reason for missing data:substance/mixture is non-soluble (in water)
Kinematic viscosity	Unavailable	
Solubility	immiscible with water	
Partition coefficient: n-octanol/water	Unavailable	
Vapour pressure	Unavailable	
Density and/or Relative density	0,799 kg/l	
Relative vapour density	Unavailable	
Particle characteristics	Unenforceable	

9.2. Other information

9.2.1. Information on physical hazard classes

Information not available

9.2.2. Other safety features

VOC (Directive 2010/75/EU)	96,77 % - 773,18 g/litre
Explosive properties	non-explosive
Oxidizing properties	non-oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

There is no particular danger of reaction with other substances under normal conditions of use.

N-BUTYL ACETATE

It decomposes on contact with: water.

10.2. Chemical stability

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

10.3. Possibility of dangerous reactions

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Vapours can form explosive mixtures with air. Contact with strong oxidants (such as peroxides and chromates) can cause a fire hazard. A mixture with nitrates or other strong oxidants (such as chlorates, perchlorates and liquid oxygen) may generate an explosive mass. Sensitivity to heat, friction and shock cannot be assessed in advance.

10.4. Conditions to be avoided

Avoid the overheating process. Avoid accumulation of electrostatic charges. Avoid any source of ignition.

N-BUTYL ACETATE

Avoid exposure to: moisture, heat sources, open flames.

10.5. Incompatible materials

N-BUTYL ACETATE

Incompatible with: water, nitrates, strong oxidants, acids, alkali, zinc.

10.6. Dangerous decomposition products

Thermal decomposition or fire can release gases and vapours that are potentially harmful to health.

SECTION 11. Toxicological information

In the absence of experimental toxicological data on the product itself, the possible health hazards of the product have been assessed on the basis of the properties of the substances contained, in accordance with the criteria laid down in the reference legislation for classification.

Therefore, consider the concentration of the individual hazardous substances mentioned in section. 3, to assess the toxicological effects arising from exposure to the product.

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

METHANOL The minimum lethal dose for humans by ingestion is considered to be in the range of 300 to 1000 mg/kg. Ingestion of 4 to 10 ml of the substance may result in permanent blindness (IPCS) in adult humans.

N-BUTYL ACETATE In humans, vapours cause irritation of the eyes and nose. In case of repeated exposure, skin irritation, dermatosis (with dryness and cracking of the skin) and keratitis occur. Acute toxicity assessment (ingestion/inhalation/skin contact): practically non-toxic for a single exposure. Not irritating to the skin. Not irritating to the eyes. Assessment of sensitisation: tests in animals showed no sensitising action.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Local effects. Information about the product:

Contact with these skin. Symptoms: Redness. The exposure repeated can provoke dryness
or cracking of skin.

Eye contact: Eye contact can cause irritation.

Inhalation: inhalation of vapours can cause drowsiness and dizziness. It can cause irritation. Inhalation of vapors can cause headaches, nausea, vomiting and impaired consciousness.

Ingestion: if ingested accidentally the product can enter the lungs due to its low viscosity and provoke the rapid development of serious injuries pulmonary (keep under medical supervision for 48 hours). Ingestion can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Can cause central nervous system depression.

Other adverse effects

Vapor concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headache and dizziness, have anesthetic effect, and cause other effects on the central nervous system. Repeated and/or prolonged skin contact with low-viscosity materials can decrease the skin with possible development of irritation and dermatitis. Small amounts of fluid, aspirated into the lungs if swallowed or vomited, can cause chemical pneumonia or pulmonary edema.

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

N-BUTYL ACETATE

WORKERS: inhalation; skin contact.

METHANOL

WORKERS: inhalation; skin contact.

POPULATION: ingestion of contaminated food or water; skin contact of products containing the substance.

Immediate, delayed and chronic effects from short- and long-term exposure

N-BUTYL ACETATE

In humans, vapors of substance cause irritation of the eyes and nose. In case of repeated exposure, skin irritation, dermatosis (with dryness and cracking of the skin) and keratitis occur.

METHANOL

The minimum lethal dose for humans by ingestion is considered to be in the range of 300 to 1000 mg/kg. Ingestion of 4 to 10 ml of the substance may result in permanent blindness (IPCS) in adult humans.

Interactive effects

N-BUTYL ACETATE

A case of acute poisoning was reported in a 33-year-old worker in a tank cleaning operation with a preparation containing xylenes, butyl acetate and ethylene glycol acetate. Subject had conjunctival irritation and upper respiratory tract, drowsiness and motor coordination disorders, resolved within 5 hours. The symptoms are attributed to mixed xylene poisoning and butyl acetate, with a possible synergistic effect responsible for neurological effects. Cases of vacuolar keratitis are reported in workers exposed to a mixture of vapours of butyl acetate and isobutanol, but with uncertainty about the liability of a particular solvent (INRC, 2011).

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no relevant components)
ATE (Oral) of the mixture: Not classified (no relevant components)
ATE (Cutaneous) of the mixture: Not classified (no relevant components)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

LD50 (Cutaneous): > 2000 mg/kg
LD50 (Oral examination): > 5000 mg/kg
LC50 (vapour inhalation): > 9300 mg/l/4h

N-BUTYL ACETATE

LD50 (Cutaneous): > 5000 mg/kg Rabbit
LD50 (Oral examination): > 6400 mg/kg Rat
LC50 (vapour inhalation): 21,1 mg/l/4h Rat

Adipated bis(2-ethylhexyl)

LD50 (Oral examination): 24600 mg/kg rat
LC50 (vapour inhalation): > 5,7 mg/l/4h rat

SKIN CORROSION/ SKIN IRRITATION

Repeated exposure can cause skin dryness and cracking.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Repeated exposure can cause skin dryness and cracking. Slightly irritating to the skin in case of prolonged exposure.

Adipated bis(2-ethylhexyl)

Method: Read-across with similar or surrogate substances.
Result: not irritating.

SEVERE EYE DAMAGE/ EYE IRRITATION

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

EYE CONTACT: May cause mild short-term eye discomfort. Based on test data for materials of similar structure to OECD 405 guidelines.

Adipated bis(2-ethylhexyl)

Method: Read-across with similar or surrogate substances.
Result: not irritating.

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitisation

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"
It's not supposed to be a respiratory sensitizer.

Adipated bis(2-ethylhexyl)
Method: Read-across with similar or surrogate substances.
Result: not irritating.

Skin sensitisation

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"
It is assumed not to be a skin sensitizer under OECD 406 guidelines.

Adipated bis(2-ethylhexyl)
Method: Draize test. Intracutaneous test. Induction: the intradermal. Challenge: intradermale. Guinea pig male.
Metodo: Mallette and von Haam, 1952. Induzione: no data challenge: no data. Rabbit.
Method: structure-activity relations (QSAR) models
Result: non-sensitive (weight of evidence).

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"
The mutagenic potential of the substance has been extensively investigated in a range of in vivo and in vitro assays. Genetic toxicity: negative. It is assumed that it is not a germ cell mutagen. Based on test data for materials of similar structure to OECD Guidelines 471 473 474 476 478 479.

Adipated bis(2-ethylhexyl)
Studies on mutagenic potential have shown negative genetic toxicity.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"
This product is not classified as carcinogenic. It's supposed not to cause cancer. Based on test data for materials of similar structure to OECD 453 guidelines.

Adipated bis(2-ethylhexyl)
NOAEL (carcinogenicity):> 25000 ppm (nominal) (male/female).
Neoplastic effects: no effect.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"
No information available. It is assumed that it is not a toxic agent for reproduction. Based on test data for materials of similar structure to OECD Guidelines 414 421 422.

Harmful effects on sexual function and fertility

Adipated bis(2-ethylhexyl)
Metodo: equivalente o simile a OECD Guidelaine 415 (one- Generation Reproduction Toxicity Study).
Oral: feed. Rat (Wistar) male/female.
Results:
NOAEL (P): ca. 170 mg/kg bw/day (nominale) (maschio/femmina)

NOAEL (F1): ca. 170 mg/kg bw/day (nominale) (maschio/femmina)

Harmful effects on the development of progeny

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

The results of the developmental toxicity studies for the substance, which were provided for in the OECD Guidelines, and those of the screening studies in the same area, did not reveal toxicity in rats.

Adipated bis(2-ethylhexyl)

Method: equivalent or similar to OECD Guidelaine 414 (Prenatal Developmental Toxicity Study)(used to determine the limit dose). Oral: feed.

Rat (Wistar)

Results:

NOAEL (tossicità madre): ca. 170 mg/kg bw/day (nominale)

NOEL (fetotoxicity): 28 mg/kg bw/day (nominal) (male/female)

Effects on lactation or through lactation

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Lactation: It is assumed that it is not harmful to breastfed infants.

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

May cause drowsiness or dizziness

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Single exposure: May cause drowsiness and dizziness. This substance does not meet the EU criteria for classification.

Adipated bis(2-ethylhexyl)

Unavailable

Target organs

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Central nervous system

Route of exposure

Information not available

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Repeated exposure: It is assumed that it will not cause damage to organs following prolonged and repeated exposure. Based on test data for materials of similar structure to OECD Guidelines 408 413 422. No known effect based on the information provided.

Target organs

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Central nervous system.

Route of exposure

Information not available

DANGER IN THE EVENT OF ASPIRATION

Aspiration toxic

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"
Fluid can enter the lungs and cause damage (chemical pneumonia, potentially fatal).

Adipated bis(2-ethylhexyl)
Irrelevant

11.2. Information on other hazards

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

SECTION 12. Ecological information

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Use according to good working practices, avoiding to disperse the product in the environment. Notify the competent authorities if the product has reached waterways or sewers or if it has contaminated the soil or vegetation. C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5) hydrocarbons: Based on the ecological information below and according to the criteria indicated in the regulations on dangerous substances, this substance is not classified as hazardous to the environment.

12.1. Toxicity

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): below is a summary of the most representative studies of the Registration Dossier . Aquatic toxicity:

Endpoint: Invertebrates - Short term (Daphnia magna)

Result: EL50 (48 h): >1000 mg/L (mobility); EL50 (24 h): >1000 mg/L (mobility)

Comments: Key study (C9-C11, <2% aromatic) - OECD Guideline 202 - SRC (1995)

Endpoint: Invertebrates - Short term (Chaetogammarus marinus)

Result: LL50 (48 h): > 1000 mg/L (mortality); LL50 (24 h): >1000 mg/L (mortality)

Comments: Key study (C9-C11 <2 % aromatic) OECD Guideline 202 - TNO (1992)

Endpoint: Invertebrates - Long term (Daphnia magna)

Result: NOELR (21 days): 0.23 mg/L (reproduction)

Comments: Support study (C9-C11 <2 % aromatic) (Q)SAR Modeled date - CONCAWE (2010)

Endpoint: Algae (Pseudokirchnerella subcapitata) Inhibition of growth

Result: EC50 (72 h): > 1000 mg/L (Growth); EC50 (72 h): > 1000 mg/L (biomassa); NOELR (72 h): 3 mg/L (cell number); NOELR (72 h): 100 mg/L (Growth)

Comments: Key study (C9-C11 <2 % aromatic) OECD Guideline 201 - SRC (1995)

Endpoint: Fish - Short term (Oncorhynchus mykiss)

Result: LL50 (24 h):>1000 mg/L; LL0 (24 h):1000 mg/L; LL50 (48 h): >1000 mg/L; LL0 (48 h):1000 mg/L; LL50 (72): >1000 mg/L; LL0 (72 h) mg/L:

Comments: Key study (C9-C11 <2 % aromatic) OECD Guideline 203 - SRC (1995).

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

LC50 - Fish > 1000 mg/l/96h

EC50 - Crustaceans > 1000 mg/l/48h

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

Adipated bis(2-ethylhexyl)

LC50 - Fish > 0,78 mg/l/96h oncorhynchus mykiss

EC50 - Crustaceans	> 500 mg/l/48h daphnia magna
EC50 - Algae/ Aquatic Plants	> 500 mg/l/72h algae
NOEC Cronica Crustaceans	0.77 mg/l Daphnia magna, fresh water, semi-static. OECD Guideline 211

12.2. Persistence and degradability

C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5):

Abiotic degradability: Hydrolysis: this substance is resistant to hydrolysis. Therefore, this process will not contribute to a measurable loss of degradation of the substance in the environment.

Biodegradation: Based on the available studies and properties of C9-C16 hydrocarbons, this substance is considered inherently biodegradable.

Method : Non-adapted microorganisms OECD Guideline 301 F

Result : Readily biodegradable 80 % (28 days)

Comments : Reliable key study without restrictions (C9-C11, <2% aromatic)

Source: Shell (1997).

METHANOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

N-BUTYL ACETATE

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic"

Inherently degradable

Adipated bis(2-ethylhexyl)

Rapidly degradable

12.3. Bioaccumulation potential

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Standard tests for this endpoint are not applicable to UVCB substances.

METHANOL

Partition coefficient: n-octanol/water -0,77

BCF 0,2

N-BUTYL ACETATE

Partition coefficient: n-octanol/water 2,3

BCF 15,3

Adipated bis(2-ethylhexyl)

BCF 27 l/kg

12.4. Mobility in soil

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Koc absorption: Standard tests for this endpoint are not applicable to substances

UVCB.

N-BUTYL ACETATE

Partition coefficient: soil/water < 3

Adipated bis(2-ethylhexyl)

Partition coefficient: soil/water 4,687 l/kg

12.5. Results of the PBT and vPvB assessment

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Comparison with the criteria of Annex XIII of the reach Regulation
Persistence assessment: Some hydrocarbon structures contained in this substance have characteristics of P (Persistent) or vp (very Persistent).

Evaluation of bioaccumulation potential: the structure of most hydrocarbons contained in this substance DO NOT have characteristics of vb (very Bioaccumulative) however some components have characteristics of B (Bioaccumulative).

Toxicity assessment: For hydrocarbon structures showing P and B characteristics, toxicity has been assessed but no relevant components meet the toxicity criteria except for anthracene, which has been confirmed as a PBT. Since anthracene is not present, the product is not considered PBT/vPvB.

According to the available data, the product does not contain PBT or vPvB substances in percentage to 0.1%.

12.6. Endocrine interference properties

Hydrocarbons C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic (EC 919-857-5): Dispersion in the environment can lead to contamination of environmental matrices (air, soil, subsoil, surface water and groundwater). Use according to good working practice, avoiding to disperse the products in the environment.

According to the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disrupters 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. Residues of the product are to be considered hazardous special waste. The hazardous nature of the waste containing part of this product must be assessed on the basis of the legal provisions in force.

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

Waste transport may be subject to ADR.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in accordance with national waste management rules.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, 1993
IATA:

14.2. UN official shipping designation

ADR / RID: FLAMMABLE LIQUID, N.A.S. (hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2% aromatic, n-butyl acetate)
 IMDG: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics, n-butyl acetate)
 IATA: FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics, n-butyl acetate)

14.3. Transport hazard classes

ADR / RID: Class: 3 Tag: 3
 IMDG: Class: 3 Tag: 3
 IATA: Class: 3 Tag: 3

**14.4. Packing group**

ADR / RID, IMDG, III
 IATA:

14.5. Hazards to the environment

ADR / RID: NO
 IMDG: NO
 IATA: NO

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 30	Quantity Limited: 5 L	Code of restriction in gallery: (D/E)
IMDG:	Special provision: - EMS: F-E, <u>S-E</u>	Quantity Limited: 5 L	
IATA:	Cargo:	Quantity	Instructions Packaging: 366
	Pass.:	maxim: 220 L Quantity	Instructions Packaging: 355
	Special arrangement:	maximum: 60 L A3	

14.7. Bulk shipping in accordance with IMO Acts

Irrelevant information

SECTION 15. Regulatory information**15.1. Specific laws and regulations on health, safety and environment for the substance or mixture**

Category Seveso - Directive 2012/18/EU: P5c

Restrictions on the product or substances contained in accordance with Annex XVII Regulation (EC) 1907/2006Product

Point 3-40

Substances contained

Point	20	Diocetyl tin dilaurate Reg. REACH: 01- 2119979527-19
-------	----	--

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

Unenforceable

Sostanze in Candidate List (Art. 59 REACH)

According to the available data, the product does not contain SVHC substances in percentage to 0.1%.

Substances subject to authorisation (Annex XIV REACH)

None

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

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Health Checks

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

15.2. Chemical safety assessment

A chemical safety assessment has been prepared for the following substances in the mixture:
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclic, <2%aromatic, n-butyl acetate.

SECTION 16. Other information

Text of the hazard statements (H) referred to in sections 2 to 3 of the safety data sheet:

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 3	Acute toxicity, category 3
SALES BY EUROSTAT 1	Specific target organ toxicity - single exposure, category 1
Asp. Tox. 1	Aspiration hazard, category 1
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

LEGEND:

- ADR: European agreement for the transport of dangerous goods by road
- CAS: Chemical Abstract Service Issue
- EC: Identification number in ESIS (European Database of Existing Substances)
- CLP: Regulation (EC) No 1272/2008
- DNEL: Derived layer without effect
- EC50: Concentration giving effect to 50% of the tested population
- EmS: Emergency Schedule
- GHS: Global harmonised system for the classification and labelling of chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Immobilization concentration of 50% of the tested population
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX: Identification number in CLP Annex VI
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50
- OEL: Level of occupational exposure
- PBT: Persistent, bioaccumulative 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: Regulation for the international transport of dangerous goods by train
- STA: Acute Toxicity Estimation
- TLV: Threshold limit value
- TLV CEILING: Concentration not to be exceeded at any time during work exposure.
- TWA: Weighted Average Exposure Limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulative according to REACH
- WGK: Water hazard class (Germany).

GENERAL BIBLIOGRAPHY:

1. Regolamento (CE) 1907/2006 del Parlamento Europeo (REACH)
2. European Parliament Regulation (EC) 1272/2008 (CLP)
3. Regulation (EU) 2020/878 (All. 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
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Website IFA GESTIS
- Website Agenzia ECHA
- Chemical SDS model database - Ministry of Health and Higher Institute of Health

Note for user:

The information contained in this sheet is based on the knowledge available from 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 product properties.

Since the use of the product does not fall under our direct control, it is the obligation of the user to observe under his responsibility the laws and regulations in force on hygiene and safety. They do not take responsibility for improper use.

To provide adequate training for chemical workers.

METHODS FOR CALCULATING CLASSIFICATION

Physical Chemical Hazards: The classification of the product has been derived from the criteria set out in the CLP Regulation Annex I Part 2. The methods for assessing physical chemical properties are given in Section 9.

Health hazards: The product classification is based on the calculation methods set out in Annex I to CLP Part 3, unless otherwise indicated in Section 11.

Hazard to the environment: The product classification is based on the calculation methods set out in Annex I to CLP Part 4, unless otherwise indicated in Section 12.

Changes compared to the previous revision

Changes have been made to the following sections:

01/02/03/08/09/11/12/15/16.