Safety Data Sheet

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: **P1053DO - P1053DO07L**
Product name **B-3 ACTION INOX**
UFI : **ARM0-C0WF-500Y-TACH**

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

Intended use **Detergent, protective, polishing for stainless steel surfaces**

Identified Uses	Industrial	Professional	Consumer
Detergent, protective, polishing	-	ERC: 8c. PROC: 11. PC: 14, 31, 35. LCS: PW.	ERC: 8c. PC: 14, 31, 35. LCS: C. .

1.3. Details of the supplier of the safety data sheet

Name **BELLINZONI S.R.L.**
Full address **Via Mezzano 64**
District and Country **28069 Trecate (NO)**
Italia

Tel. +39 0321 770558

e-mail address of the competent person

responsible for the Safety Data Sheet **laboratorio@bellinzoni.com**
Supplier: **BELLINZONI S.r.l.**

1.4. Emergency telephone number

For urgent inquiries refer to

- **CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA – Roma - Piazza Sant`Onofrio, 4 CAP: 00165 – Telefono: 06 68593726 – Responsabile: Marco Marano**
- **Az. Osp. Univ. Foggia – Foggia - V.le Luigi Pinto, 1 – CAP: 71122 – Telefono: 800183459 – Responsabile: Anna Lepore**
- **Az. Osp. "A. Cardarelli" – Napoli - Via A. Cardarelli, 9 – CAP: 80131081- Telefono: 5453333 – Responsabile: Romolo Villani**
- **CAV Policlinico "Umberto I" - Roma - V.le del Policlinico, 155 – CAP: 161 – Telefono: 06-49978000 – Responsabile: M. Caterina Grassi**
- **CAV Policlinico "A. Gemelli" - Roma - Largo Agostino Gemelli, 8 – CAP: 168 – Telefono: 06-3054343 – Responsabile: Alessandro Barelli**
- **Az. Osp. "Careggi" U.O. Tossicologia Medica – Firenze - Largo Brambilla, 3 – CAP: 50134 – Telefono: 055-7947819 – Responsabile: Francesco Gambassi**
- **CAV Centro Nazionale di Informazione Tossicologica - Pavia – Via Salvatore Maugeri, 10 – CAP: 27100 - Telefono: 0382-24444 – Responsabile: Carlo Locatelli**
- **Osp. Niguarda Ca' Granda – Milano - Piazza Ospedale Maggiore,3 – CAP: 20162 – Telefono: 02-66101029 – Responsabile: Franca Davanzo**
- **Azienda Ospedaliera Papa Giovanni XXII – Bergamo - Piazza OMS, 1 – CAP: 24127 – Telefono: 800883300 – Responsabile: Bacis Giuseppe**
- **Azienda Ospedaliera Integrata Verona – Verona - Piazzale Aristide Stefani, 1 – CAP: 37126 – Telefono 800011858 – Responsabile: Giorgio Ricci**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: Warning

Hazard statements:

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
EUH210	Safety data sheet available on request.

Precautionary statements:

P102	Keep out of reach of children.
P280	Wear protective gloves / eye protection / face protection.
P302+P352	IF ON SKIN: wash with plenty of water
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.

Contains: 2-METHYL-2H-ISOTHIAZO-3-ONE, 1,2-BENZISOTHIAZOL-3(2H)-ONE

Ingredients according to Regulation (EC) No. 648/2004

Less than 5% non-ionic surfactants

Perfume (Limonene, Linalool), Preservation agents: 2-methyl-2H-isothiazol-3-one, 1,2-benzisothiazol-3(2H)-one, 5-chloro-2-methyl-2H- isothiazol-3-one

2.3. Other hazards

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

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

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL		
INDEX -	7 ≤ x < 8	Eye Irrit. 2 H319
EC 202-888-7		
CAS 100-79-8		
REACH Reg. 01-2120066005-66-XXXX		
2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL		
INDEX -	2 ≤ x < 3	Eye Dam. 1 H318
EC 692-614-6		
CAS 5660-53-7		
REACH Reg. 01-2120039709-47-XXXX		
2-METHYL-4-ISOTHIAZOLIN-3-ONE		
INDEX -	0,0015 ≤ x < 0,06	Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1
EC 220-239-6		Skin Sens. 1 H317: ≥ 0,0015%
CAS 2682-20-4		LD50 Oral: 120 mg/kg bw, LD50 Dermal: 242 mg/kg bw
REACH Reg. 01-2120764690-50		
1,2-BENZISOTHIAZOL-3(2H)-ONE		
INDEX -	0 ≤ x < 0,05	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1
EC 220-120-9		Skin Sens. 1 H317: ≥ 0,05%
CAS 2634-33-5		LD50 Oral: 490 mg/kg bw
REACH Reg. 01-2120761540-60		

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

AUS	Österreich	Gesamte Rechtsvorschrift für Grenzwerteverordnung 2021 , Fassung vom 17.06.2021
BEL	Belgique	Liste de valeurs limites d'exposition aux agents chimiques, livre VI du code du bien-être au travail
BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CHE	Suisse / Schweiz	Valeurs limites d`exposition aux postes de travail: VME/VLE (SUVA). Grenzwerte am Arbeitsplatz: MAK (SUVA)
CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
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
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
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
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α` 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ ``σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία``»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnimkemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
IRL	Éire	2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)
LTU	Lietuva	Jsakymas dėl lietuvos higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
LVA	Latvija	Grozījumi Ministru kabineta 2007. gada 15. maija noteikumos Nr. 325 "Darba aizsardzības prasības saskarē ar ķīmiskajām vielām darba vietās" (prot. Nr. 32 18. §; prot. Nr. 1 22. §)
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
SWE	Sverige	Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1)
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády

		Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	ACGIH 2021

2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,2	mg/l
Normal value in marine water	0,2	mg/l
Normal value for fresh water sediment	1,183	mg/kg dw
Normal value for marine water sediment	0,1183	mg/kg dw
Normal value for water, intermittent release	0,09	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	2,5	mg/kg dw

2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,598	mg/l
Normal value in marine water	0,0598	mg/l
Normal value for fresh water sediment	2,71	mg/kg
Normal value for marine water sediment	0,27	mg/kg
Normal value for water, intermittent release	5,98	mg/l
Normal value of STP microorganisms	32	mg/l
Normal value for the terrestrial compartment	0,197	mg/kg

LINALOOL

Predicted no-effect concentration - PNEC		
Normal value in fresh water	200	µg/l
Normal value in marine water	2	mg/l
Normal value for fresh water sediment	2,22	mg/kg dw
Normal value for marine water sediment	222	µg//kg dw
Normal value of STP microorganisms	10	mg/l
Normal value for the food chain (secondary poisoning)	7,8	mg/kg
Normal value for the terrestrial compartment	327	µg/kg dw

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		1,2 µg/kg bw/day		200 µg/kg bw/day				
Inhalation		4,1 mg/m3	4,1	700 µg/m³		16,5 mg/m3	16,5	2,8 mg/m3
Skin	1,5 mg/cm2	2,5 mg/kg bw/d	1,5 mg/cm2	1,25 mg/kg bw/d	3 mg/cm2	5 mg/kg bw/d	3 mg/cm2	2,5 mg/kg bw/d

DIPENTENE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
RD	LTU	150	25	300	50	
TLV	NOR	140	25			
NGV/KGV	SWE	150	25	300 (C)	50 (C)	

2-METHYL-4-ISOTHIAZOLIN-3-ONE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	3,39	µg/l
Normal value in marine water	3,39	µg/l
Normal value for water, intermittent release	3,39	µg/l
Normal value of STP microorganisms	230	µg/l
Normal value for the terrestrial compartment	47,1	µg/kg soil dw

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	21 µg/m³		43 µg/m³		43 µg/m³		21 µg/m³	
Skin		53 mg/kg bw/d		27 mg/kg bw/d				

1,2-BENZISOTHIAZOL-3(2H)-ONE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	4,03	µg/l
Normal value in marine water	403	ng/l
Normal value for fresh water sediment	49,9	µg/l
Normal value for marine water sediment	4,99	µg/kg
Normal value for water, intermittent release	1,1	µg/l
Normal value of STP microorganisms	1,03	mg/l
Normal value for the terrestrial compartment	3	mg/kg soil dw

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation				1.2 mg/m3		6.81		6.81 mg/m3
Skin				345 µg/kg bw/d				966 µg/kg bw/d

5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	0,05				
MAK	CHE	0,2		0,4		
AGW	DEU	0,2				

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.
When choosing personal protective equipment, ask your chemical substance supplier for advice.
Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear normal work clothes

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	Method:visual
Colour	white	
Odour	fresh	Method:own
Melting point / freezing point	< -5 °C	Method:own
Initial boiling point	183 °C	Substance:2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL
Flammability	not available	Remark:it does not contain substances classified as flammable
Lower explosive limit	not available	Reason for missing data:it does not contain substances classified as explosive
Upper explosive limit	not available	Reason for missing data:it does not contain substances classified as explosive
Flash point	> 60 °C	Remark:it does not contain substances classified as flammable

Auto-ignition temperature	360 °C	Substance:2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL Reason for missing data:No explosive components or components that ignite spontaneously in contact with the air at room temperature
Decomposition temperature	not available	
pH	10,90 ± 0,50	Method:own instrument: METTLER TOLEDO SEVEN GO electrode: METTLER TOLEDO InLab 413 SG / 2m IP67
Kinematic viscosity	5,0 mm2/s	Method:Calculation
Dynamic viscosity	5,0 cP	Method:BROOKFIELD DV1 LV (spindle=1 / speed=100 / T=20°C)
Solubility	miscible in water in any ratio	Method:own
Partition coefficient: n-octanol/water	not available	Reason for missing data:The product is a blend
Vapour pressure	17,15 mmHg	Method:calculation
Density and/or relative density	1,00 - 1,05 g/cm3	Method:Own Instrument: METTLER TOLEDO DENSITOPRO
Relative vapour density	2,6	Substance:2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

VOC (Directive 2010/75/EU)	0,05 % - 0,46 g/litre	
VOC (volatile carbon)	0,04 % - 0,37 g/litre	
Explosive properties	not explosive	Remark:it does not contain substances classified as explosive
Oxidising properties	not oxidizing	Remark:it does not contain substances classified as oxidizing

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

Heat, flames and sparks

10.5. Incompatible materials

Strong oxidizing agents. Strongly reducing agents. Strong acids. Strong foundations

10.6. Hazardous decomposition products
Acetic acid, Ethanol. In contact with an acid it develops: Acetone. By combustion or by free thermal decomposition (Carbon oxides, CO + CO2)

SECTION 11. Toxicological information

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL

LD50 (Dermal):	2000 mg/kg rat - Linee Guida 402 per il Test dell'OECD
LD50 (Oral):	7000 mg/kg rat
LC50 (Inhalation mists/powders):	> 5,11 mg/l rat - Linee Guida 403 per il Test dell'OECD

2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL

LD50 (Oral):	> 2000 mg/kg rat - Metodo: OECD TG 423

2-METHYL-4-ISOTHIAZOLIN-3-ONE

LD50 (Dermal):	242 mg/kg bw
LD50 (Oral):	120 mg/kg bw
LC50 (Inhalation vapours):	340 µg/m³

1,2-BENZISOTHIAZOL-3(2H)-ONE

LD50 (Dermal):	2000 mg/kg bw ratto
LD50 (Oral):	490 mg/kg bw ratto

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION
Causes serious eye irritation

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

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 disruptors with human health effects under evaluation.

SECTION 12. Ecological information

12.1. Toxicity

2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL	
LC50 - for Fish	16700 mg/l/96h Pimephales promelas (Cavedano americano)
EC50 - for Crustacea	> 96 mg/l/48h Daphnia similis (Pulce d'acqua)
EC50 - for Algae / Aquatic Plants	> 92 mg/l/72h Pseudokirchneriella subcapitata (alghe cloroficee)

1,2-BENZISOTHIAZOL-3(2H)-ONE	
LC50 - for Fish	2,15 mg/l/4d
EC50 - for Crustacea	29 mg/l/48h
EC50 - for Algae / Aquatic Plants	110 µg/l
Chronic NOEC for Algae / Aquatic Plants	40,3 µg/l

2-METHYL-4-ISOTHIAZOLIN-3-ONE

LC50 - for Fish	4,77 mg/l/96h freshwater fish
EC50 - for Crustacea	934 µg/l/48h freshwater invertebrates
EC50 - for Algae / Aquatic Plants	103 µg/l freshwater algae
EC10 for Algae / Aquatic Plants	50,3 µg/l freshwater algae
Chronic NOEC for Fish	4,93 mg/l
Chronic NOEC for Crustacea	44,2 µg/l freshwater invertebrates
Chronic NOEC for Algae / Aquatic Plants	50,3 µg/l freshwater algae

2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL

LC50 - for Fish	> 100 mg/l/96h Oncorhynchus mykiss (Trota iridea) - Metodo: Linee Guida 203 per il Test dell'OECD
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna (Pulce d'acqua grande) - Metodo: OECD TG 202
EC50 - for Algae / Aquatic Plants	598 mg/l/72h Pseudokirchneriella subcapitata (alghe cloroficee) - Metodo: OECD TG 201
EC10 for Algae / Aquatic Plants	262 mg/l/48h Pseudokirchneriella subcapitata (alghe cloroficee) - Metodo: OECD TG 201

12.2. Persistence and degradability

2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL
NOT rapidly degradable

1,2-BENZISOTHIAZOL-3(2H)-ONE

Solubility in water	1,288 g/l

NOT rapidly degradable

2-METHYL-4-ISOTHIAZOLIN-3-ONE

Solubility in water	489 g/l

Degradability: information not available

2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL

Solubility in water	34,6 g/l

NOT rapidly degradable

12.3. Bioaccumulative potential

1,2-BENZISOTHIAZOL-3(2H)-ONE

Partition coefficient: n-octanol/water	0,7
BCF	6,62

2-METHYL-4-ISOTHIAZOLIN-3-ONE

Partition coefficient: n-octanol/water	-0,486

2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL

Partition coefficient: n-octanol/water	1,57

12.4. Mobility in soil

2,2-DIMETHYL-1,3-DIOXOLAN-4-ILMETHANOL	
Partition coefficient: soil/water	< 1,25 Linee Guida 121 per il Test dell'OECD
1,2-BENZISOTHIAZOL-3(2H)-ONE	
Partition coefficient: soil/water	0,97
2-ISOBUTYL-2-METHYL-1,3-DIOXOLANE-4-METHANOL	
Partition coefficient: soil/water	0,95 Metodo: Linee Guida 106 per il Test dell'OECD

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) 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

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point	3 - 40

Contained substance

Point	75

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

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.

H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH210	Safety data sheet available on request.

Use descriptor system:

ERC	**8c**	Widespread use leading to inclusion into/onto article (indoor)
LCS	**C**	Consumer use
LCS	**PW**	Widespread use by professional workers
PC	**14**	Metal surface treatment products
PC	**31**	Polishes and wax blends
PC	**35**	Washing and cleaning products
PROC	**11**	Non industrial spraying

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
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 (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII 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
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.
CALCULATION METHODS FOR CLASSIFICATION
Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

SUMI
Safe Use of Mixtures Information

AISE_SUMI_PW_11_2_G

Version 1.1, August 2018

Professional uses; (Trigger) spraying

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

This SUMI applies to professional uses of products in a spraying application. This Safe Use Information is based on the **AISE_SWED_PW_11_2.**

Operational Conditions

Maximum duration	60 minutes per day.
Range of application / Process conditions	Indoor use
	Process carried out at room temperature.
	In case of dilution, tap water at a maximum temperature of 45°C is used.
Air exchange rate	Provide a basic standard of general ventilation (1 to 3 air changes per hour). No LEV required.

Risk Management Measures

Measures related to personal protective equipment (PPE), hygiene and health evaluation	Wear suitable gloves and eye protection. See section 8 of the SDS of this product for specifications. 
	Training of workers in relation to proper use and maintenance of PPEs must be ensured.
Environmental measures	Prevent that undiluted product reaches surface waters.
	If appropriate **AISE SPERC 8a.1.a.v2** may apply: wide dispersive use resulting in release to municipal sewage treatment plant.

Additional good practice advice

Don't eat or drink. Don't smoke. Don't use in proximity of open flame.	
Wash hands after use. Avoid contact with damaged skin. Do not mix with other products.	
Spillage instructions	Dilute with fresh water and mop up.
Hygiene practices	Follow the product instructions as specified on the label or in the product information sheet and use good occupational hygiene practices as specified in Section 7 of the product SDS.

Additional information depending on product composition

The label and (when required) the Safety Data Sheet contain additional, product specific information crucial for working safely with mixtures. Please refer to the product label and SDS for information including, but not limited to: product hazard classification, potentially allergenic fragrances, notable ingredients and threshold limit values (when available).

Disclaimer

This is a document for communicating generic conditions of safe use of a product. It is the responsibility of the formulator to link this SUMI to the SDS of a specific product that he is selling. If a SUMI (or associated SWED) code is mentioned in the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the SUMI is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier for an ingredient that contributes to the classification of the mixture, the formulator has performed a safety assessment himself.
Following Occupational Health legislation, the employer of workers that use products that are assessed as safe following SUMI conditions remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product.This document is provided by A.I.S.E. for general information purposes only. The formulator uses the content of this document at its sole risk. A.I.S.E. disclaims any liability to any person or entity for any loss, damage no matter of what kind (actual, consequential, punitive or otherwise), injury, claim, liability or other cause of any kind or character based upon or resulting from the use (even partly) of the content of this document.

WORKING INSTRUCTIONS SHEET

The purpose of this sheet is to provide the personnel carrying out the cleaning operations with instructions for an appropriate and safe use of the products and for the correct management of emergency situations.

Operation planned	Non industrial spraying [PROC11]
Product name	B-3 ACTION INOX
Risks of the product as it is	H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.
Handling of the product as it is	Handle the product after consulting all the other sections of this safety data sheet. Avoid the dispersion of the product in the environment. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas
PPE required for the product as it is	Protect hands with category III work gloves (see standard EN 374). Wear normal work clothes Wear airtight protective goggles (see standard EN 166).
In case of emergency (accidents involving exposure to the product)	Inform the client immediately. Immediately notify the employer. Contact the Anti-Poison Center listed in section 1.4 of the SDS
In case of accidental spillage of large quantities of the product as it is	Wear adequate protective equipment (including personal protective equipment referred to in section 8 of the SDS) to prevent contamination of skin, eyes and personal clothing. Suck up the leaked product into a suitable container. Evaluate the compatibility of the container to be used with the product, checking the sect. 10 of the SDS. Absorb the remainder with inert absorbent material. Provide sufficient ventilation of the place affected by the leak. The disposal of contaminated material must be carried out in accordance with the provisions of section 13 of the SDS
Product storage	Keep only in the original container. Store in a ventilated place, away from sources of ignition. Keep containers tightly closed. Keep the product in clearly labeled containers. Avoid overheating. Avoid violent shocks. Keep the containers away from any incompatible materials, checking the sect. 10 of the SDS
In case of accidents, emergencies or fire in the work area	Immediately notify the client, the employer. Follow the instructions for emergencies. Follow the instructions in sect. 5 of the SDS