

1 Identification

*** Product identifier**

*** Trade name: Flexoclean Automatic Cliché Cleaner SB**

*** Article number:** 1350

*** Application of the substance / the mixture** Cleaning agent/ Cleaner

*** Details of the supplier of the safety data sheet**

*** Manufacturer/Supplier:**

Clean Solutions Group
Bliek 8
4941 SG Raamsdonksveer - NL
Tel.: +31 (0)162 - 57 6 222
Email: info@cleansolutionsgroup.eu
Website: www.cleansolutionsgroup.eu

Distributor:
The Provident Group
2319 East Pensar Drive
Appleton, WI 54911
Tel.: 1-920-733-5415
Email: info@providentgrp.com

*** Emergency telephone number:**

Clean Solutions Group: +31 (0)162 - 57 62 29
ChemTel LLC
(800) 255-3924 (North America)
+1 (813) 248-0585 (International)
National Capital Poison Center: 1-800-222-1222
These services are only available to health professionals

2 Hazard(s) identification

*** Classification of the substance or mixture**

Flammable Liquids 4 H227 Combustible liquid.
Skin Irritation 2 H315 Causes skin irritation.
Eye Irritation 2A H319 Causes serious eye irritation.

*** Label elements**

*** GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

*** Hazard pictograms**



GHS07

*** Signal word** Warning

*** Hazard statements**

H227 Combustible liquid.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

*** Precautionary statements**

P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/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.

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P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

* **Other hazards**

* **Results of PBT and vPvB assessment**

* **PBT:** Not applicable.

* **vPvB:** Not applicable.

3 Composition/information on ingredients

* **Chemical characterization: Mixtures**

* **Description:** Mixture of the substances listed below with nonhazardous additions.

* **Dangerous components:**

123-42-2	4-hydroxy-4-methylpentan-2-one ⚠ Eye Irritation 2A, H319	50-100%
111-76-2	butyl cellosolve ⚠ Acute Toxicity - Oral 4, H302; Acute Toxicity - Inhalation 4, H332; Skin Irritation 2, H315; Eye Irritation 2A, H319; Flammable Liquids 4, H227	10-25%

4 First-aid measures

* **Description of first aid measures**

* **After inhalation:** Supply fresh air; consult doctor in case of complaints.

* **After skin contact:** Immediately rinse with water.

* **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

* **After swallowing:** If symptoms persist consult doctor.

* **Information for doctor:**

* **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

* **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures

* **Extinguishing media**

* **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

* **Special hazards arising from the substance or mixture** No further relevant information available.

* **Advice for firefighters**

* **Protective equipment:** No special measures required.

6 Accidental release measures

* **Personal precautions, protective equipment and emergency procedures** Not required.

* **Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

* **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

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*** Reference to other sections**

See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

*** Protective Action Criteria for Chemicals**
*** PAC-1:**

123-42-2	4-hydroxy-4-methylpentan-2-one	150 ppm
111-76-2	butyl cellosolve	60 ppm

*** PAC-2:**

123-42-2	4-hydroxy-4-methylpentan-2-one	350 ppm
111-76-2	butyl cellosolve	120 ppm

*** PAC-3:**

123-42-2	4-hydroxy-4-methylpentan-2-one	2100* ppm
111-76-2	butyl cellosolve	700 ppm

7 Handling and storage

*** Handling:**

*** Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
*** Information about protection against explosions and fires:** No special measures required.

*** Conditions for safe storage, including any incompatibilities**
*** Storage:**

*** Requirements to be met by storerooms and receptacles:** No special requirements.
*** Information about storage in one common storage facility:** Not required.
*** Further information about storage conditions:** Keep receptacle tightly sealed.
*** Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

*** Additional information about design of technical systems:** No further data; see item 7.

*** Control parameters**
*** Components with limit values that require monitoring at the workplace:**
123-42-2 4-hydroxy-4-methylpentan-2-one

PEL	Long-term value: 240 mg/m ³ , 50 ppm
REL	Long-term value: 240 mg/m ³ , 50 ppm
TLV	Long-term value: 50 ppm

111-76-2 butyl cellosolve

PEL	Long-term value: 240 mg/m ³ , 50 ppm Skin
REL	Long-term value: 24 mg/m ³ , 5 ppm Skin
TLV	Long-term value: 20 ppm BEI, A3

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*** Ingredients with biological limit values:**

111-76-2 butyl cellosolve

BEI	200 mg/g creatinine
	Medium: urine
	Time: end of shift
	Parameter: Butoxyacetic acid (BAA) (with hydrolysis)

*** Additional information:** The lists that were valid during the creation were used as basis.

*** Exposure controls**

*** Personal protective equipment:**

*** General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.

*** Breathing equipment:** Not necessary if room is well-ventilated.

*** Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

*** Material of gloves**

Material : butyl rubber + nitrile
Thickness of the glove : ≥ 0.7 mm
Penetration time : ≥ 480 min

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

*** Penetration time of glove material**

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

*** Eye protection:**



Safety glasses



Tightly sealed goggles

*** Body protection:** Use protective suit.

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9 Physical and chemical properties

*** Information on basic physical and chemical properties**
*** General Information**
*** Appearance:**

Form:	Fluid
Color:	Clear
* Odor:	Characteristic
* Odor threshold:	Not determined.

* pH-value: Not determined.

*** Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

* Flash point: 68 °C (154.4 °F)

* Flammability (solid, gaseous): Not applicable.

* Decomposition temperature: Not determined.

* Auto igniting: Product is not selfigniting.

* Danger of explosion: Product does not present an explosion hazard.

* Lower:	1.1 Vol %
* Upper:	10.6 Vol %

* Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

* Density at 20 °C (68 °F):	0.95 g/cm ³ (7.93 lbs/gal)
* Relative density	Not determined.
* Vapor density	Not determined.
* Evaporation rate	Not determined.

*** Solubility in / Miscibility with**

Water: Fully miscible.

* Partition coefficient (n-octanol/water): Not determined.

* Dynamic: Not determined.

* Kinematic: Not determined.

* Solvent content:
VOC 89.40 %

* Other information No further relevant information available.

10 Stability and reactivity

* **Reactivity** No further relevant information available.

*** Chemical stability**
*** Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

* **Possibility of hazardous reactions** No dangerous reactions known.

* **Conditions to avoid** No further relevant information available.

* **Incompatible materials:** No further relevant information available.

* **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological information

*** Information on toxicological effects**
*** Acute toxicity:**
*** LD/LC50 values that are relevant for classification:**
123-42-2 4-hydroxy-4-methylpentan-2-one

Oral	LD50	4,000 mg/kg (rat)
Dermal	LD50	13,630 mg/kg (rab)

111-76-2 butyl cellosolve

Oral	LD50	1,200 mg/kg (ATE) 1,480 mg/kg (rat)
Dermal	LD50	400 mg/kg (rat)
Inhalative	LC50/4 h	11 mg/l (ATE)

*** Primary irritant effect:**
*** on the skin:** Irritant to skin and mucous membranes.

*** on the eye:**

 Strong irritant with the danger of severe eye injury.
 Irritating effect.

*** Additional toxicological information:**

 The product shows the following dangers according to internally approved calculation methods for preparations:
 Irritant

*** Carcinogenic categories**
*** IARC (International Agency for Research on Cancer)**

111-76-2 | butyl cellosolve

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*** NTP (National Toxicology Program)**

None of the ingredients is listed.

*** OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

*** Toxicity**
*** Aquatic toxicity:** No further relevant information available.

*** Persistence and degradability** No further relevant information available.

*** Behavior in environmental systems:**
*** Bioaccumulative potential** No further relevant information available.

*** Mobility in soil** No further relevant information available.

*** Additional ecological information:**
*** General notes:**

 Water hazard class 1 (Self-assessment): slightly hazardous for water
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

*** Results of PBT and vPvB assessment**
*** PBT:** Not applicable.

*** vPvB:** Not applicable.

*** Other adverse effects** No further relevant information available.

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13 Disposal considerations

*** Waste treatment methods**

*** Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

*** Uncleaned packagings:**

*** Recommendation:** Disposal must be made according to official regulations.

*** Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

*** UN-Number**

*** DOT, ADR, IMDG, IATA** Void

*** UN proper shipping name**

*** DOT, ADR, IMDG, IATA** Void

*** Transport hazard class(es)**

*** DOT, ADR, ADN, IMDG, IATA**

*** Class** Void

*** Packing group**

*** DOT, ADR, IMDG, IATA** Void

*** Environmental hazards:** Not applicable.

*** Special precautions for user** Not applicable.

*** Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

*** UN "Model Regulation":**

Void

15 Regulatory information

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

*** Sara**

*** Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

*** Section 313 (Specific toxic chemical listings):**

111-76-2 | butyl cellosolve

*** TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

*** Hazardous Air Pollutants**

None of the ingredients is listed.

*** Proposition 65**

*** Chemicals known to cause cancer:**

None of the ingredients is listed.

*** Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

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*** Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

*** Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

*** Cancerogenity categories**
*** EPA (Environmental Protection Agency)**

111-76-2 | butyl cellosolve

NL

*** TLV (Threshold Limit Value)**

111-76-2 | butyl cellosolve

A3

*** MAK (German Maximum Workplace Concentration)**

111-76-2 | butyl cellosolve

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*** NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

*** National regulations:**
*** Technical instructions (air):**

Class	Share in %
NK	89.4

*** Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

*** Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

The information given in this Material Safety Sheet refer to the product described in this sheet, and is provided in the supposition that the product will be used in a proper way and for the purpose indicated by the manufacturer.

It is the responsibility of the user to take advised precautions, and also to make sure that this information is complete and sufficient for the use of the product. It is recommended to pass this information, if necessary, in an adapted form, to personnel and other interested parties.

Manufacturer does not carry any responsibility for use of the product, in any way, which is not in accordance with the instructions and the purposes indicated by the manufacturer.

*** Contact:**
*** NFPA-ratings (scale 0 - 4)**

 Health = 2
 Fire = 2
 Reactivity = 0

*** HMIS-ratings (scale 0 - 4)**

HEALTH	2
FIRE	2
REACTIVITY	0

 Health = 2
 Fire = 2
 Reactivity = 0

*** Date of preparation / last revision** 03/23/2023

*** Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

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IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flammable Liquids 4: Flammable liquids – Category 4
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Skin Irritation 2: Skin corrosion/irritation – Category 2
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

* **Sources** <http://echa.europa.eu>* * **Data compared to the previous version altered.** *

US