

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

## 1 Identification

- **Product identifier**
- **Trade name:** ProChem® PERFECT 71
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Chemical Consultants Inc.  
 1850 Wild Turkey Circle  
 Corona, CA 92880  
 USA  
 +1 (951) 735-5511  
 ncollins@ccidom.com
- **Information department:** Product safety department
- **Emergency telephone number:** INFOTRAC 1-800-535-5053

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

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GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

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- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS07

- **Signal word** Warning
- **Hazard statements**  
 Flammable liquid and vapor.  
 Causes skin irritation.  
 Causes serious eye irritation.
- **Precautionary statements**  
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Wear protective gloves / eye protection / face protection.  
 Ground/bond container and receiving equipment.  
 Keep container tightly closed.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Wash thoroughly after handling.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

Trade name: ProChem® PERFECT 71

(Contd. of page 1)

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Specific treatment (see on this label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = \*1

Fire = 2

Reactivity = 0

· **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:**

111-90-0	2-(2-ethoxyethoxy)ethanol	20-40%
763-69-9	ethyl 3-ethoxypropionate	20-40%
111-76-2	2-butoxyethanol	10-20%
108-94-1	cyclohexanone	1-10%
123-42-2	4-hydroxy-4-methylpentan-2-one	1-10%
97-85-8	isobutyl isobutyrate	1-10%
2807-30-9	2-(propyloxy)ethanol	1-5%
	Nonylphenol ethoxylate	1-5%

### 4 First-aid measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Generally the product does not irritate the skin.

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

**Trade name: ProChem® PERFECT 71**

(Contd. of page 2)

- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Immediately call a 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:**  
CO<sub>2</sub>, 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:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Dilute with plenty of water.  
For large spills: 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).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **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.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

Trade name: ProChem® PERFECT 71

(Contd. of page 3)

· **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:**

### 111-90-0 2-(2-ethoxyethoxy)ethanol

WEEL Long-term value: 25 ppm

### 111-76-2 2-butoxyethanol

PEL Long-term value: 240 mg/m<sup>3</sup>, 50 ppm  
SkinREL Long-term value: 24 mg/m<sup>3</sup>, 5 ppm  
SkinTLV Long-term value: 97 mg/m<sup>3</sup>, 20 ppm  
BEI

### 108-94-1 cyclohexanone

PEL Long-term value: 200 mg/m<sup>3</sup>, 50 ppmREL Long-term value: 100 mg/m<sup>3</sup>, 25 ppm  
SkinTLV Long-term value: 50 mg/m<sup>3</sup>, 20 ppm  
Skin

### 123-42-2 4-hydroxy-4-methylpentan-2-one

PEL Long-term value: 240 mg/m<sup>3</sup>, 50 ppmREL Long-term value: 240 mg/m<sup>3</sup>, 50 ppmTLV Long-term value: 238 mg/m<sup>3</sup>, 50 ppm· **Ingredients with biological limit values:**

### 111-76-2 2-butoxyethanol

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

### 108-94-1 cyclohexanone

BEI 80 mg/L  
Medium: urine  
Time: end of shift at end of workweek  
Parameter: 1.2-Cyclohexanediol with hydrolysis (nonspecific, semi-quantitative)8 mg/L  
Medium: urine  
Time: end of shift  
Parameter: Cyclohexanol with hydrolysis (nonspecific, semi-quantitative)· **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.

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

**Trade name: ProChem® PERFECT 71**

(Contd. of page 4)

*Immediately remove all soiled and contaminated clothing.*

*Wash hands before breaks and at the end of work.*

*Store protective clothing separately.*

*Avoid contact with the eyes.*

*Avoid contact with the eyes and skin.*

· **Breathing equipment:**

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.*

· **Protection of hands:**



Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

· **Material of gloves**

*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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:**

Fluid

**Color:**

According to product specification

· **Odor:**

Characteristic

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

**Melting point/Melting range:**

Undetermined.

**Boiling point/Boiling range:**

142 °C (288 °F)

· **Flash point:**

50 °C (122 °F)

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

190 °C (374 °F)

· **Decomposition temperature:**

Not determined.

(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

Trade name: ProChem® PERFECT 71

(Contd. of page 5)

· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	1.1 Vol %
<b>Upper:</b>	11.6 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	1.2 hPa (1 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.9689 g/cm <sup>3</sup> (8.085 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>VOC content:</b>	780.0 g/l / 6.51 lb/gl
· <b>Other information</b>	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.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant

(Contd. on page 7)

US

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

Trade name: ProChem® PERFECT 71

(Contd. of page 6)

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **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:**

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.

## 13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

- **Uncleaned packagings:**

- **Recommendation:**

Dispose of content and/or container in accordance with local, regional, national and/or international regulations

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

## 14 Transport information

- **UN-Number**

- **DOT**

NOT DOT REGULATED FOR DOMESTIC GROUND  
TRANSPORTATION

- **IMDG, IATA**

UN1993

- **UN proper shipping name**

- **IMDG, IATA**

FLAMMABLE LIQUID, N.O.S. (2-(propyloxy)ethanol,  
CYCLOHEXANONE)

(Contd. on page 8)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

Trade name: ProChem® PERFECT 71

(Contd. of page 7)

· **Transport hazard class(es)**· **IMDG, IATA**

· **Class** 3 Flammable liquids  
 · **Label** 3

· **Packing group**  
 · **IMDG, IATA** III

· **Environmental hazards:**  
 · **Marine pollutant:** No

· **Special precautions for user** Warning: Flammable liquids  
 · **Danger code (Kemler):** 30  
 · **EMS Number:** F-E, S-E

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **IMDG**  
 · **Limited quantities (LQ)** 5L  
 · **Excepted quantities (EQ)** Code: E1  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":** UN1993, Flammable liquids, n.o.s. (2-(propyloxy)ethanol, Cyclohexanone), 3, III

## 15 Regulatory information

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

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

None of the ingredients is listed.

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

111-76-2 | 2-butoxyethanol

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

All ingredients are 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.

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

None of the ingredients is listed.

(Contd. on page 9)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/17/2015

Reviewed on 07/17/2015

**Trade name: ProChem® PERFECT 71**

(Contd. of page 8)

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

None of the ingredients is listed.

**· Carcinogenic categories**
**· EPA (Environmental Protection Agency)**

111-76-2	2-butoxyethanol	NL
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**· TLV (Threshold Limit Value established by ACGIH)**

111-76-2	2-butoxyethanol	A3
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108-94-1	cyclohexanone	A3
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**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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

**· Hazard pictograms**


GHS02    GHS07

**· Signal word** Warning

**· Hazard statements**

Flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

**· Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Wear protective gloves / eye protection / face protection.

Ground/bond container and receiving equipment.

Keep container tightly closed.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

**IF ON SKIN (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

**If skin irritation occurs:** Get medical advice/attention.

**If eye irritation persists:** Get medical advice/attention.

**In case of fire:** Use for extinction: CO<sub>2</sub>, powder or water spray.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· Department issuing SDS:** Environment protection department.

**· Contact:** Mr. Collins

(Contd. on page 10)

**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 07/17/2015

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**Trade name: ProChem® PERFECT 71**

(Contd. of page 9)

**· Date of preparation / last revision** 07/17/2015 / -**· Abbreviations and acronyms:***ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)**IMDG: International Maritime Code for Dangerous Goods**IATA: International Air Transport Association**ACGIH: American Conference of Governmental Industrial Hygienists**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)**NFPA: National Fire Protection Association (USA)**HMIS: Hazardous Materials Identification System (USA)**VOC: Volatile Organic Compounds (USA, EU)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**Flam. Liq. 3: Flammable liquids, Hazard Category 3**Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2**Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A*

US