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1 Identification

- · Product identifier
- · Trade name: ProChem® 430R
- 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.



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2A H319 Causes serious eye irritation. Skin Sens. 1 H317 May cause an allergic skin reaction.

· Label elements

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



· Signal word Danger

· Hazard-determining components of labeling: citrus terpene · Hazard statements Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways.

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· Precautionary statements
Keep away from flames and hot surfaces. – No smoking.
Use explosion-proof electrical/ventilating/lighting/equipment.
Avoid breathing dust/fume/gas/mist/vapors/spray
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.
Contaminated work clothing must not be allowed out of the workplace.
If swallowed: Immediately call a poison center/doctor.
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).
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Do NOT induce vomiting.
In case of fire: Use for extinction: CO2, powder or water spray.
Take off contaminated clothing and wash it before reuse.
Store locked up.
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
1 0 Reactivity = 0
· HMIS-ratings (scale 0 - 4)
HEALTH 1 $Health = 1$
FIRE 2 $Fire = 2$
$\begin{array}{c} \text{REACTIVITY} \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \end{array} \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \end{array} \\ \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \hline \\ \\ \hline \end{array} \\ \\ \\ \hline \end{array} \\ \\ \hline \end{array} \\ \\ \hline \\ \\ \hline \end{array} \\ \\ \\ \hline \end{array} \\ \\ \\ \\$
REACTIVITY U 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:			
Ī	111-76-2	2-butoxyethanol		10-20%
Ī	94266-47-4	citrus terpene		10-20%
Ī	106-65-0	dimethyl succinate		10-20%
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Nonylphenol ethoxylate

(Contd. of page 2) 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.

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

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · 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:
- 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 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.

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Prevent formation of aerosols.
Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.

· 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.

Protect from heat and direct sunlight.

• 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:

111-76-2 2-butoxyethanol

- PEL Long-term value: 240 mg/m³, 50 ppm Skin
- REL Long-term value: 24 mg/m³, 5 ppm Skin
- TLV Long-term value: 97 mg/m³, 20 ppm BEI

· 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

• 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 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

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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 \cdot *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

General Information	
· Appearance:	Fluid
Form: Color:	
· Odor:	According to product specification Characteristic
• Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	162 °C (324 °F)
· Flash point:	48 °C (118 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	237 °C (459 °F)
• Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	15.6 Vol %
· Vapor pressure at 20 °C (68 °F):	3 hPa (2 mm Hg)
• Density at 20 •C (68 •F):	0.9799 g/cm ³ (8.177 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

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· Solubility in / Miscibility with		
Water:	Fully miscible.	
· Partition coefficient (n-octan	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
VOC content:	795.0 g/l / 6.63 lb/gl	
• 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.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

111-76-2 2-butoxyethanol

Oral LD50 1480 mg/kg (rat)

Dermal LD50 400 mg/kg (rab)

94266-47-4 citrus terpene

Oral LD50 >5000 mg/kg (rabbit)

Dermal LD50 >5000 mg/kg (rabbit)

• Primary irritant effect:

• on the skin: Irritant to skin and mucous membranes.

- on the eye: Irritating effect.
- Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

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

Irritant

· 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.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity:

94266-47-4 citrus terpene

EC50 (static) 0.36 mg/kg (daphnia)

· 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.

· UN-Number	
DOT	NOT DOT REGULATED FOR DOMESTIC GROUN TRANSPORTATION
· IMDG, IATA	UN1993
· UN proper shipping name	
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (citrus terpene, 2-butoxyethanol)
• Transport hazard class(es)	
· IMDG, IATA	
Class	3 Flammable liquids

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· 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:	<i>F-E</i> , <u><i>S-E</i></u>
· 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 $(\widetilde{E}Q)$	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. (citrus terpene, 2 butoxyethanol), 3, III

15 Regulatory information

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

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

111-76-2 2-butoxyethanol

· TLV (Threshold Limit Value established by ACGIH)

111-76-2 2-butoxyethanol

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(Contd. of page 8) · 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 Danger · Hazard-determining components of labeling: citrus terpene · Hazard statements Flammable liquid and vapor. Causes skin irritation. Causes serious eve irritation. May cause an allergic skin reaction. May be fatal if swallowed and enters airways. · Precautionary statements *Keep away from flames and hot surfaces. – No smoking.* Use explosion-proof electrical/ventilating/lighting/equipment. Avoid breathing dust/fume/gas/mist/vapors/spray 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. Contaminated work clothing must not be allowed out of the workplace. If swallowed: Immediately call a poison center/doctor. 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). Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Do NOT induce vomiting. In case of fire: Use for extinction: CO2, powder or water spray. Take off contaminated clothing and wash it before reuse. Store locked up. 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

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• Date of preparation / last revision 07/16/2015 / -
· 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
DOT: US Department of Transportation
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
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Asp. Tox. 1: Aspiration hazard, Hazard Category 1