



78162 78162.1 - Human Recombinant CD40 Ligand

Revision Date 28-Mar-2024 Revision Number 1.2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier		
Product Name	Human Recombinant CD40 Ligand	
Other means of identification		
Catalog Number	78162 78162.1	
Document Number	DX22235	
Synonym	None	
Recommended use of the chemical and restrictions on use		
Recommended Use	Laboratory reagent	
Details of the supplier of the safety data sheetManufacturer/Supplier STEMCELL Technologies Canada Inc. Suite 500 - 1618 Station Street Vancouver, British Columbia V6A 1B6 CanadaEmergency telephone number Emergency Telephone1-800-667-0322		
	2. HAZARDS IDENTIFICATION	

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Label elements





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The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance No information available

Physical state Solid

Odor No data available

Other Information

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed





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Symptoms	No information available.	
Indication of any immediate medica	I attention and special treatment needed	
Note to physicians	Treat symptomatically.	
5. FIRE-FIGHTING MEASURES		
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.	
Specific hazards arising from the chemical	No information available.	
Explosion data Sensitivity to Mechanical Impac Sensitivity to Static Discharge	t None. None.	
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautionsEnvironmental precautionsSee Section 12 for additional Ecological Information.Methods and material for containmentand cleaning upMethods for containmentPrevent further leakage or spillage if safe to do so.Methods for cleaning upPick up and transfer to properly labeled containers.Prevention of secondary hazardsClean contaminated objects and areas thoroughly observing environmental regulations.





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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

<u>Conditions for safe storage,</u> including any incompatibilities Store in accordance with information listed on the Product Information Sheet (PIS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls

Engineering controls	Showers
	Eyewash stations
	Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties





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Physical state Appearance Color Odor Odor threshold

Property pН Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density **Relative density** Water solubility Solubility in other solvents Partition coefficient Autoignition temperature **Decomposition temperature Kinematic viscosity** Dynamic viscosity **Explosive properties Oxidizing properties**

Other Information Softening point Molecular weight Molecular formula VOC Content (%) Liquid Density Bulk density

Solid

No information available No information available No data available No data available

Values

No data available No data available

No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available No data available

No information available No information available No information available No information available No information available No information available

Remarks • Method

None known None known None known None known None known None known

None known None known None known None known None known None known None known None known

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under recommended transport or storage conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.





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Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information		
Inhalation	Specific test data for the substance or mixture is not available.	
Eye contact	Specific test data for the substance or mixture is not available.	
Skin contact	Specific test data for the substance or mixture is not available.	
Ingestion	Specific test data for the substance or mixture is not available.	
Symptoms related to the physical, chemical and toxicological characteristics		
Symptoms	No information available.	

Numerical measures of toxicity

Acute toxicity

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Product Information

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

Skin corrosion/irritation	No information available.
Product Information	
Serious eye damage/eye irritation Product Information	No information available.
Respiratory or skin sensitization	No information available.

Product Information





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Germ cell mutagenicity Product Information	No information available.		
Carcinogenicity	No information available.		
Reproductive toxicity	No information available. Product Information		
STOT - single exposure	No information available.		
STOT - repeated exposure	No information available. Product Information		
Aspiration hazard	No information available.		
12. ECOLOGICAL INFORMATION			
Ecotoxicity The environmental impact of this product has not been fully investigated. Product Information Product Information			
Persistence and degradability	No information available.		
Bioaccumulation	There is no data for this product.		
Other adverse effects	No information available.		

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.

14. TRANSPORT INFORMATION





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DOT	Not regulated
TDG	Not regulated
MEX	Not regulated
ICAO (air)	Not regulated
IATA	Not regulated
IMDG Marine pollutant	Not regulated
RID	Not regulated
ADR	Not regulated
ADN	Not regulated



International Inventories	
TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories





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Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By,

Quality Control. STEMCELL Technologies Canada Inc.

Revision Date 28-Mar-2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.





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End of Safety Data Sheet