

SAFETY DATA SHEET

according to Work Health and Safety Regulations 2011

AdipoRed Assay Reagent

Version 2.0

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SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : AdipoRed™ Assay Reagent

Material number : PT-7009

Manufacturer or supplier's detailsCompany : Capsugel Australia Pty Ltd.
Suite 610, 12 Century Circuit
Norwest NSW 2153, AustraliaLonza Ltd
Muenchensteinerstrasse 38
CH-4002 Basel, Switzerland

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E-mail address : sds@lonza.com

Emergency telephone number : +41 61 313 94 94 (24h)

Recommended use of the chemical and restrictions on use

Recommended use : Scientific research and development

SECTION 2. HAZARDS IDENTIFICATION**GHS Classification**

Flammable liquids : Category 4

GHS label elements

Hazard pictograms : None

Signal word : Warning

Hazard statements : H227 Combustible liquid.

Precautionary statements : **Prevention:**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.**Other hazards which do not result in classification**

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Dimethyl sulfoxide	67-68-5	>= 90 - <= 100

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
- In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.
Get medical attention if irritation develops and persists.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- If swallowed : Do not induce vomiting without medical advice.
Immediately give large quantities of water to drink.
Call a physician immediately.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : No information available.
- Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry powder
Water spray
Foam
- Hazardous combustion products : Carbon oxides (COx)
Sulphur oxides (SOx)
- Specific extinguishing methods : Use water spray to cool unopened containers.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use respirator when performing operations involving potential exposure to vapour of the product.
- Environmental precautions : Prevent product from entering drains.
- Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.
Do not flush into surface water or sanitary sewer system.

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SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Take precautionary measures against static discharges. Keep away from open flames, hot surfaces and sources of ignition.
- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
- Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
- Conditions for safe storage : Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Store at room temperature.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Dimethyl sulfoxide	67-68-5	TWA	250 ppm	WEEL

- Engineering measures** : Use only in area provided with appropriate exhaust ventilation.

Personal protective equipment

- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.
- Hand protection
 Material : Nitrile rubber
 Rate of permeability : > 480 min
- Remarks : Wear suitable gloves.
- Eye protection : Tightly fitting safety goggles
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. No special protective equipment required.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : liquid
- Colour : red

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Odour	:	odourless
Odour Threshold	:	no data available
pH	:	Not applicable
Melting point/freezing point	:	18,4 °C Information refers to the main component.
Initial boiling point and boiling range	:	189 °C Information refers to the main component.
Flash point	:	89 °C Method: closed cup Information refers to the main component.
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Flammability (liquids)	:	no data available
Upper explosion limit / upper flammability limit	:	42 %(V) Information refers to the main component.
Lower explosion limit / Lower flammability limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	no data available
Density	:	no data available
Water solubility	:	completely miscible
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Decomposition temperature	:	no data available
Viscosity, dynamic	:	no data available
Viscosity, kinematic	:	no data available
Explosive properties	:	Not explosive

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	None known.

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Conditions to avoid	:	Temperature 89 °C Keep away from heat and sources of ignition.
Incompatible materials	:	Strong oxidizing agents Strong reducing agents Halogens Copper
Hazardous decomposition products	:	No decomposition if stored normally.

SECTION 11. TOXICOLOGICAL INFORMATION

Further information

Remarks: No data is available on the product itself.

The following toxicological data refer to:

Dimethyl sulfoxide(CAS-No.: 67-68-5)

Acute toxicity

Acute oral toxicity : LD50 (Rat): 14 500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 40250 ppm
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat): 5 330 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rat): 40 000 mg/kg

Skin corrosion/irritation

Species: Rabbit
Exposure time: 4 h
Assessment: No skin irritation
Method: OECD Test Guideline 404
Result: Mild skin irritation
GLP: yes

Serious eye damage/eye irritation

Species: Rabbit
Result: Mild eye irritation
Exposure time: 24 h
Assessment: No eye irritation
Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Species: Guinea pig
Assessment: Did not cause sensitisation on laboratory animals.
Method: OECD Test Guideline 406

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Result: not sensitizing

Germ cell mutagenicity

Genotoxicity in vitro : Test Type: Ames test
Species: Salmonella
Result: negative

: Test Type: Chromosome aberration test in vitro
Species: Chinese hamster ovary cells
Metabolic activation: yes
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Rat
Application Route: ip
Dose: 200, 1000 and 5000 mg/kg/d
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Carcinogenicity

Remarks: no data available

Reproductive toxicity

Effects on fertility : Species: Rat
Application Route: Oral
General Toxicity - Parent: NOAEL: 1 000 mg/kg body weight
General Toxicity F1: NOAEL: 1 000 mg/kg body weight
Early Embryonic Development: NOAEL: 1 000 mg/kg body weight

Effects on foetal development : Species: Rat
Application Route: Oral
Method: OECD Test Guideline 414
Result: No adverse effects

STOT - single exposure

Remarks: no data available

Exposure routes: inhalation (vapour)
Target Organs: Respiratory system

STOT - repeated exposure

Remarks: no data available

Repeated dose toxicity

Species: Rat
NOAEC: 47,5 mg/m³
Application Route: Inhalation
Target Organs: Liver, Lungs

Further information

Remarks: Can be absorbed through skin.

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to fish : Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: no data available

Toxicity to algae :
Remarks: no data available

Toxicity to microorganisms : Remarks: no data available

Persistence and degradability

Biodegradability : Result: no data available

Bioaccumulative potential

Bioaccumulation : Remarks: no data available

Components:

Dimethyl sulfoxide:

Partition coefficient: n-octanol/water : log Pow: -1,35

Mobility in soil

Distribution among environmental compartments : Remarks: no data available

Other adverse effects

Additional ecological information : No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of in accordance with local regulations.
Contact waste disposal services.

Contaminated packaging : Dispose of as unused product.
Do not burn, or use a cutting torch on, the empty drum.

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SECTION 14. TRANSPORT INFORMATION

IATA Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

IMDG Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : Marine pollutant: no

ADR Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

RID Not dangerous goods

UN number : Not applicable
Proper shipping name : Not applicable
Transport hazard class : Not applicable
Packing group : Not applicable
Environmental hazards : no

Special precautions for user : none

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform Scheduling of Medicines and Poisons
 Not applicable

SECTION 16. OTHER INFORMATION

Revision Date : 29.06.2021

Full text of other abbreviations

WEEL : US. OARS. WEELs Workplace Environmental Exposure Level

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Guide, as amended

WEEL / TWA : Time weighted average

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System
Date format : dd.mm.yyyy

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