

SAFETY DATA SHEET



3100 OFFGEL 24 Well Frame Set, Part Number 5188-8013

Section 1. Identification

Product identifier : 3100 OFFGEL 24 Well Frame Set, Part Number 5188-8013
Part no. (chemical kit) : 5188-8013
Part no. : Mineral Oil 5188-6443
 Glycerol 50 percent 5188-6440

Relevant identified uses of the substance or mixture and uses advised against

Material uses : Reagents and Standards for Analytical Chemistry Laboratory Use
 Mineral Oil 50 ml
 Glycerol 50 percent 10 ml

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
 679 Springvale Road
 Mulgrave
 Victoria 3170, Australia
 1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

Glycerol 50 percent Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%

GHS label elements

Signal word : Mineral Oil No signal word.
 Glycerol 50 percent No signal word.
Hazard statements : Mineral Oil No known significant effects or critical hazards.
 Glycerol 50 percent No known significant effects or critical hazards.

Precautionary statements

Prevention : Mineral Oil Not applicable.
 Glycerol 50 percent Not applicable.
Response : Mineral Oil Not applicable.
 Glycerol 50 percent Not applicable.
Storage : Mineral Oil Not applicable.
 Glycerol 50 percent Not applicable.
Disposal : Mineral Oil Not applicable.
 Glycerol 50 percent Not applicable.

Supplemental label elements

Additional warning phrases : Mineral Oil Not applicable.
 Glycerol 50 percent Not applicable.

Other hazards which do not result in classification : Mineral Oil None known.
 Glycerol 50 percent None known.

Section 3. Composition and ingredient information

Substance/mixture : Mineral Oil
Glycerol 50 percent

Substance
Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
Mineral Oil mineral oil	100	8042-47-5
Glycerol 50 percent Glycerol	≥30 - ≤60	56-81-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Mineral Oil Glycerol 50 percent	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Mineral Oil Glycerol 50 percent	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Mineral Oil Glycerol 50 percent	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Mineral Oil Glycerol 50 percent	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Mineral Oil
Glycerol 50 percent

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Section 4. First aid measures

Inhalation	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.
Inhalation	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.
Skin contact	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.
Ingestion	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Mineral Oil Glycerol 50 percent	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Mineral Oil Glycerol 50 percent	No specific treatment. No specific treatment.
Protection of first-aiders	: Mineral Oil Glycerol 50 percent	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: Mineral Oil Glycerol 50 percent	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Mineral Oil Glycerol 50 percent	None known. None known.
Specific hazards arising from the chemical	: Mineral Oil Glycerol 50 percent	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Mineral Oil Glycerol 50 percent	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide

Section 5. Firefighting measures

Special protective actions for fire-fighters	: Mineral Oil	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Glycerol 50 percent	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Mineral Oil	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Glycerol 50 percent	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Mineral Oil	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	Glycerol 50 percent	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	: Mineral Oil	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Glycerol 50 percent	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	: Mineral Oil	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Glycerol 50 percent	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
<u>Methods and material for containment and cleaning up</u>		
Methods for cleaning up	: Mineral Oil	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Glycerol 50 percent	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an

Section 6. Accidental release measures

inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Mineral Oil
Glycerol 50 percent

Put on appropriate personal protective equipment (see Section 8).
Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene

: Mineral Oil
Glycerol 50 percent

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Mineral Oil
Glycerol 50 percent

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Mineral Oil mineral oil	Safe Work Australia (Australia, 1/2014). TWA: 5 mg/m ³ 8 hours. Form: Mist
Glycerol 50 percent Glycerol	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours.

Section 8. Exposure controls and personal protection

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- | | | |
|----------------------------------|--------------------------------------|-------------------------------------------------|
| Physical state | : Mineral Oil
Glycerol 50 percent | Liquid. [Oily liquid.]
Liquid. |
| Colour | : Mineral Oil
Glycerol 50 percent | Colourless.
Not available. |
| Odour | : Mineral Oil
Glycerol 50 percent | Not available.
Not available. |
| Odour threshold | : Mineral Oil
Glycerol 50 percent | Not available.
Not available. |
| pH | : Mineral Oil
Glycerol 50 percent | Not available.
Not available. |
| Melting point | : Mineral Oil
Glycerol 50 percent | Not available.
Not available. |
| Boiling point | : Mineral Oil
Glycerol 50 percent | 179 to 210°C (354.2 to 410°F)
Not available. |
| Flash point | : Mineral Oil
Glycerol 50 percent | Closed cup: 135°C (275°F)
Not available. |
| Evaporation rate | : Mineral Oil
Glycerol 50 percent | Not available.
Not available. |
| Flammability (solid, gas) | : Mineral Oil
Glycerol 50 percent | Not applicable.
Not applicable. |

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	: Mineral Oil Glycerol 50 percent	Not available. Not available.
Vapour pressure	: Mineral Oil Glycerol 50 percent	Not available. Not available.
Vapour density	: Mineral Oil Glycerol 50 percent	Not available. Not available.
Relative density	: Mineral Oil Glycerol 50 percent	0.875 to 0.905 Not available.
Solubility	: Mineral Oil Glycerol 50 percent	Insoluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Mineral Oil Glycerol 50 percent	Not available. Not available.
Auto-ignition temperature	: Mineral Oil Glycerol 50 percent	260 to 371.11°C (500 to 700°F) Not available.
Decomposition temperature	: Mineral Oil Glycerol 50 percent	Not available. Not available.
Viscosity	: Mineral Oil Glycerol 50 percent	Not available. Not available.

Section 10. Stability and reactivity

Reactivity	: Mineral Oil Glycerol 50 percent	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Mineral Oil Glycerol 50 percent	The product is stable. The product is stable.
Possibility of hazardous reactions	: Mineral Oil Glycerol 50 percent	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.
Incompatible materials	: Mineral Oil Glycerol 50 percent	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
Hazardous decomposition products	: Mineral Oil Glycerol 50 percent	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Mineral Oil mineral oil	LC50 Inhalation Dusts and mists LD50 Oral	Rat Rat	>5 mg/l >5000 mg/kg	4 hours -
Glycerol 50 percent Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Glycerol 50 percent Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Mineral Oil mineral oil	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure : **Mineral Oil**
Glycerol 50 percent

Not available.
Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : **Mineral Oil**
Glycerol 50 percent

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Inhalation : **Mineral Oil**
Glycerol 50 percent

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Skin contact : **Mineral Oil**
Glycerol 50 percent

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Ingestion : **Mineral Oil**
Glycerol 50 percent

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : **Mineral Oil**
Glycerol 50 percent

No specific data.
No specific data.

Inhalation : **Mineral Oil**
Glycerol 50 percent

No specific data.
No specific data.

Section 11. Toxicological information

Skin contact	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.
Ingestion	: Mineral Oil Glycerol 50 percent	No specific data. No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Developmental effects	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: Mineral Oil Glycerol 50 percent	No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Mineral Oil Glycerol 50 percent Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Mineral Oil Glycerol 50 percent Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Mineral Oil mineral oil	-	-	Readily

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Mineral Oil mineral oil	>6	-	high
Glycerol 50 percent Glycerol	-1.76	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

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Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

Section 15. Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: <input checked="" type="checkbox"/> All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: <input checked="" type="checkbox"/> Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted.
Malaysia	: <input checked="" type="checkbox"/> Not determined.
New Zealand	: <input checked="" type="checkbox"/> All components are listed or exempted.
Philippines	: <input checked="" type="checkbox"/> All components are listed or exempted.
Republic of Korea	: <input checked="" type="checkbox"/> All components are listed or exempted.
Taiwan	: <input checked="" type="checkbox"/> All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: <input checked="" type="checkbox"/> All components are listed or exempted.
United States	: All components are listed or exempted.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 11/07/2018

Date of previous issue : 28/07/2014

Version : 3

Key to abbreviations

: ADG = Australian Dangerous Goods
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 NOHSC = National Occupational Health and Safety Commission
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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