

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Creation Date 03-May-2012

Revision Date 25-Sep-2023

Revision Number 7

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

| Product Description: | Mineral oil, suitable for nujol mull preparations for IR-spect. |
|---------------------------|---|
| Cat No. : | 124020000; 124020010; 124020025; 124020060 |
| Synonyms | Nujol; Petrolatum, liquid; Paraffin oil |
| CAS No | 8042-47-5 |
| EC No | 232-455-8 |
| REACH registration number | 01-2119487078-27 |

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

| Recommended Use | Laboratory chemicals. |
|--------------------------------|---|
| Sector of use | SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites |
| Product category | PC21 - Laboratory chemicals |
| Process categories | PROC15 - Use as a laboratory reagent |
| Environmental release category | ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates) |
| Uses advised against | No Information available |

1.3. Details of the supplier of the safety data sheet

Company

UK entity/business name Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, United Kingdom

EU entity/business name

begel.sdsdesk@thermofisher.com

Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a, 2440 Geel, Belgium

E-mail address

-

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

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Category 1 (H304)

Health hazards

Aspiration Toxicity

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways

Precautionary Statements

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician P331 - Do NOT induce vomiting

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

| Component | CAS No | EC No | Weight % | CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567 |
|-------------------|-----------|-------------------|----------|---|
| White mineral oil | 8042-47-5 | EEC No. 232-455-8 | >95 | Asp. Tox. 1 (H304) |

| REACH registration number | 01-2119487078-27 |
|---------------------------|------------------|
|---------------------------|------------------|

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

Mineral oil, suitable for nujol mull preparations for IR-spect.

4.1. Description of first aid measures

| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
|-------------------------------------|--|
| Skin Contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. |
| Ingestion | Clean mouth with water. Get medical attention. Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward. |
| Inhalation | Remove from exposure, lie down. Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. Aspiration into lungs can produce severe lung damage. |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |
| 4.2. Most important symptoms and | effects, both acute and delayed |
| | No information available. |
| 4.3. Indication of any immediate me | edical attention and special treatment needed |
| Notes to Physician | Treat symptomatically. |

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO 2). Dry chemical. Chemical foam.

Extinguishing media which must not be used for safety reasons No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

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6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe mist/vapors/spray.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

Technical Rules for Hazardous Substances (TRGS) 510 Class 10 Storage Class (LGK) (Germany)

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits List source(s):

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

| Component | Acute effects local (Dermal) | Acute effects systemic (Dermal) | Chronic effects local (Dermal) | Chronic effects systemic (Dermal) |
|-------------------------------------|---------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| White mineral oil 8042-47-5 (>95) | | | | DNEL = 217.05mg/kg bw/day |

| Component | Acute effects local | Acute effects | Chronic effects local | Chronic effects |
|-----------|---------------------|-----------------------|-----------------------|-----------------------|
| _ | (Inhalation) | systemic (Inhalation) | (Inhalation) | systemic (Inhalation) |

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| White mineral oil | | DNEL = 164.56mg/m ³ |
|-------------------|--|--------------------------------|
| 8042-47-5 (>95) | | - |

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment Eye Protection

Goggles Face protection shield (European standard - EN 166)

Hand Protection Protective gloves

| | ve material rile rubber | Breakthrough time See manufacturers recommendations | Glove thickness | EU standard EN 374 | Glove comments (minimum requirement) |
|---------|-----------------------------------|---|----------------------|--------------------------|---|
| Claim a | ممهمير برامم ما امر | | nunninte nunte ative | فاعتدهم معطما مامطه بمعر | la muai jant algin ay naay ya |

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

| Respiratory Protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly |
|----------------------------|--|
| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particulates filter conforming to EN 143 |
| Small scale/Laboratory use | Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted |

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical State | Viscous liquid Liquid |
|----------------|-----------------------|
| Appearance | Clear |
| Odor | Odorless |

ACR12402

Mineral oil, suitable for nujol mull preparations for IR-spect.

| Odor Threshold | No data available | |
|------------------------------------|--------------------------|-----------------------------------|
| Melting Point/Range | No data available | |
| Softening Point | No data available | |
| Boiling Point/Range | No information available | |
| Flammability (liquid) | No data available | |
| Flammability (solid,gas) | Not applicable | Liquid |
| Explosion Limits | No data available | |
| Flash Point | > 185 °C / > 365 °F | Method - No information available |
| Autoignition Temperature | No data available | |
| Decomposition Temperature | No data available | |
| pH | No information available | |
| Viscosity | 14-19 cSt at 40 °C | |
| Water Solubility | Insoluble | |
| Solubility in other solvents | No information available | |
| Partition Coefficient (n-octanol/w | ater) | |
| Component | log Pow | |
| White mineral oil | 6 | |
| Vapor Pressure | <0.01 kPa @ 20 °C | |
| Density / Specific Gravity | 0.851 | |
| Bulk Density | Not applicable | Liquid |
| Vapor Density | No data available | (Air = 1.0) |
| Particle characteristics | Not applicable (liquid) | |
| | | |

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

| 10.1. Reactivity | None known, based on information available | | |
|---|---|--|--|
| 10.2. Chemical stability | Stable under normal conditions. | | |
| 10.3. Possibility of hazardous reactions | | | |
| Hazardous Polymerization Hazardous Reactions | Hazardous polymerization does not occur. No information available. | | |
| 10.4. Conditions to avoid | Incompatible products. | | |
| 10.5. Incompatible materials | Strong oxidizing agents. | | |

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information No acute toxicity information is available for this product

(a) acute toxicity;

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| Oral | Based on available data, the classification criteria are not met |
|------------|--|
| Dermal | Based on available data, the classification criteria are not met |
| Inhalation | Based on available data, the classification criteria are not met |

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation | | |
|---|---|-----------------------------------|-----------------|--|--|
| White mineral oil | LD50 > 5000 mg/kg (Rat) | - | - | | |
| (b) skin corrosion/irritation; | Based on available data, the c | lassification criteria are not me | et | | |
| (c) serious eye damage/irritation; | Based on available data, the classification criteria are not met | | | | |
| (d) respiratory or skin sensitization; Respiratory Skin | ; Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met | | | | |
| (e) germ cell mutagenicity; | Based on available data, the c | lassification criteria are not me | et | | |
| (f) carcinogenicity; | Based on available data, the c | lassification criteria are not me | et | | |
| | There are no known carcinoge | enic chemicals in this product | | | |
| (g) reproductive toxicity; (h) STOT-single exposure; | Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met | | | | |
| (i) STOT-repeated exposure; | Based on available data, the c | lassification criteria are not me | et | | |
| Target Organs | None known. | | | | |
| (j) aspiration hazard; | Category 1 | | | | |
| Other Adverse Effects | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information | | | | |
| Symptoms / effects,both acute and delayed | No information available. | | | | |
| 11.2. Information on other hazards | | | | | |

Endocrine Disrupting Properties

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity **Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

| Component | Freshwater Fish | Water Flea | Freshwater Algae |
|-------------------|------------------------|------------|------------------|
| White mineral oil | LC50: > 10000 mg/L/96h | | |
| | (Lepomis macrochirus) | | |

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| 12.2. Persistence and degradability Persistence | Insoluble in water, May persist. | | | | |
|--|--|--|--|--|--|
| 12.3. Bioaccumulative potential | May have some potential to bioaccumulate; Pro | oduct has a high potential to bioconcentrate | | | |
| Component | log Pow | Bioconcentration factor (BCF) | | | |
| White mineral oil | 6 | No data available | | | |
| <u>12.4. Mobility in soil</u> | The product is insoluble and floats on water . Is not likely mobile in the environment due its low water solubility. Is not likely mobile in the environment due its low water solubility and propensity to bind to soil particles | | | | |
| <u>12.5. Results of PBT and vPvB</u> assessment | Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB). | | | | |
| <u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information | This product does not contain any known or suspected endocrine disruptors | | | | |
| 12.7. Other adverse effects Persistent Organic Pollutant Ozone Depletion Potential | This product does not contain any known or su This product does not contain any known or su | spected substance | | | |

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

| Waste from Residues/Unused Products | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. |
|--|--|
| Contaminated Packaging | Dispose of this container to hazardous or special waste collection point. |
| European Waste Catalogue (EWC) | According to the European Waste Catalog, Waste Codes are not product specific, but application specific. |
| Other Information | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. |

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not regulated

14.1. UN number14.2. UN proper shipping name14.3. Transport hazard class(es)14.4. Packing group

<u>ADR</u>

Not regulated

| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | |
|---|----------------------------------|
| IATA | Not regulated |
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | |
| 14.5. Environmental hazards | No hazards identified |
| 14.6. Special precautions for user | No special precautions required. |
| 14.7. Maritime transport in bulk according to IMO instruments | Not applicable, packaged goods |

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|-------------------|-----------|-----------|---------|---------------------------------|-------|------|----------|-------|-------|
| White mineral oil | 8042-47-5 | 232-455-8 | - | - | Х | Х | KE-35412 | Х | Х |
| | | | | | | | | | |
| Component | CAS No | TSCA | notific | iventory ation - Inactive | DSL | NDSL | AICS | NZIoC | PICCS |
| White mineral oil | 8042-47-5 | Х | ACT | IVE | Х | - | Х | Х | Х |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

Not applicable

| | Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | 0 | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|-------------------|-----------|---|---|---|
| [| White mineral oil | 8042-47-5 | - | - | - |

Seveso III Directive (2012/18/EC)

| Component | CAS No | , , , | ing Quantities for Major Accident Qualifying Quantities for Safety Repo | |
|-------------------|-----------|----------------|---|--|
| | | Notification | Requirements | |
| White mineral oil | 8042-47-5 | Not applicable | Not applicable | |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Mineral oil, suitable for nujol mull preparations for IR-spect.

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

See table for values

| Component | Germany - Water Classification (AwSV) | Germany - TA-Luft Class |
|-------------------|---------------------------------------|-------------------------|
| White mineral oil | WGK1 | |

| Component | France - INRS (Tables of occupational diseases) |
|-------------------|---|
| White mineral oil | Tableaux des maladies professionnelles (TMP) - RG 36bis |

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H304 - May be fatal if swallowed and enters airways

Legend

| CAS - Chemical Abstracts Service | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory |
|---|--|
| EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances | , |
| PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances | ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals |
| WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic | TWA - Time Weighted Average IARC - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC) LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative |
| ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development | ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate |
| BCF - Bioconcentration factor | VOC - (Volatile Organic Compound) |
| Key literature references and sources for data | |

Mineral oil, suitable for nujol mull preparations for IR-spect.

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

| Creation Date | 03-May-2012 |
|------------------|-----------------|
| Revision Date | 25-Sep-2023 |
| Revision Summary | Not applicable. |

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

. 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

End of Safety Data Sheet