SAFETY DATA SHEET

PURASPEC™ 7780

Infosafe No.: MTLPF
ISSUED Date : 28/05/2020
ISSUED by: JOHNSON MATTHEY (AUST) LTD

1. Identification

GHS Product Identifier
PURASPEC™ 7780

Product Type
Solid.

Company name
JOHNSON MATTHEY PROCESS TECHNOLOGIES

Address
PO Box No 1, Billingham Stockton on Tees, TS23 1LB
UNITED KINGDOM

Telephone/Fax Number
Tel: +44 (0) 1642 523343

Emergency phone number
For Chemical Emergency ONLY (spill, leak, fire, exposure or accident) call : Australia : +(61)-290372994 (24 hours) CHEMTREC Australia (Sydney) International : +(1) 703-527-3887 CHEMTREC International (24 hours) Information limitations : For emergency calls only. Non-emergency calls cannot be serviced at this
number.

E-mail Address
protechsds.enquiries@matthey.com

Recommended use of the chemical and restrictions on use
Specific uses : Purification of hydrocarbon gases, Purification of hydrocarbon liquids; Removal of sulphur compounds, moisture

Other Names

Name
PURASPEC™ 7780

Additional Information
CHEMTREC Customer Number (CCN): CCN12026

2. Hazard Identification

GHS classification of the substance/mixture
Not classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) including Work, Health and Safety Regulations, Australia.

Hazard Statement (s)
Not Applicable

Precautionary statement – General
Not Applicable

Precautionary statement – Prevention
Not Applicable

Precautionary statement – Response
Not Applicable

Precautionary statement – Storage
Not Applicable

Precautionary statement – Disposal

Not Applicable

Supplemental Information

Not applicable.

Other Information

Classification according to Model Work Health and Safety Regulations 2011 (WHS Regulations)
Classification of the substance or mixture: Not classified.
Other hazards which do not result in classification: None known.
Environmental hazards : Not classified.

3. Composition/information on ingredients

Ingredients

Name	CAS	Proportion
Zeolite, cuboidal, crystalline, synthetic, non- fibrous	1318- 02- 1	100 %(w/w)

Other Information

Chemical identity : Zeolites
CAS number/other identifiers
CAS number : 1318-02-1
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.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Ingestion

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.

Skin

Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation occurs.

Advice to Doctor

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Indication of immediate medical attention and special treatment needed if necessary

Specific treatments : No specific treatment.

Protection for First Aiders

No action shall be taken involving any personal risk or without suitable training.

Most important symptoms/effects, acute and delayed

Over-exposure signs/symptoms:
Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: No specific data.

Other Information

See toxicological information (Section 11)

5. Fire-fighting measures

Suitable Extinguishing Media

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media
None known.

Hazards from Combustion Products
No specific data.

Special Protective Equipment for fire fighters
Fire-fighters should wear appropriate protective equipment and selfcontained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Specific Hazards Arising From The Chemical
No specific fire or explosion hazard.

Decomposition Temperature
Not available.

Precautions in connection with Fire
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.

6. Accidental release measures

Emergency Procedures
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".

Personal Precautions
For non-emergency personnel: 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.

Clean-up Methods - Small Spillages
Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

Clean-up Methods - Large Spillages
Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Environmental Precautions
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).

Other Information
Reference to other sections: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7. Handling and storage

Precautions for Safe Handling
Protective measures : Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene:
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.
Process hazards : Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Conditions for safe storage, including any incompatibilities
Store in accordance with local regulations. Store in a dry place. Keep only in the original container. 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. Store away from incompatible materials (see Section 10).
See Section 10 for incompatible materials before handling or use.

Other Information
Additional information : Further advice given in the Puraspec Operating Manual.

8. Exposure controls/personal protection

Occupational exposure limit values
Control parameters
Occupational exposure limits
Ingredient name: Zeolites
Exposure limits:
ACGIH TLV (United States, 3/2018).
TWA: 1 mg/m³ 8 hours. Form: Respirable fraction
Ingredient name: Zeolite, cuboidal, crystalline, synthetic, non-fibrous
Exposure limits:
ACGIH TLV (United States, 3/2019).
TWA: 1 mg/m³ 8 hours. Form: Respirable fraction
Ingredient name: Inhalable fraction
Exposure limits:
[Air contaminant]
ACGIH TLV (United States).
TWA: 10 mg/m³ 8 hours.
Ingredient name: Respirable dust
Exposure limits:
[Air contaminant]
ACGIH TLV (United States).
TWA: 3 mg/m³ 8 hours.

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.

Respiratory Protection
Use of Respiratory Protective Equipment (RPE) (Particle filter with high efficiency for solid particles (EN 143 or 149, Type P2 or FFP2, Associated Protection Factor (APF) = 10) or local equivalent as a minimum) is required during loading and unloading of reactors, cleaning and maintenance operations, and sampling, where exposure to dust or powder is possible. Air-fed Respiratory Protective Equipment may be used if entry to the reactor is required.

Eye Protection
Safety eyewear complying with an approved standard (EN 166 or local equivalent) is required during loading and unloading of reactors, cleaning and maintenance operations, and sampling, where exposure to dust, powder or liquid splashes is possible.

Hand Protection
Chemical/bio-chemical resistant, impervious gloves complying with an approved chemical standard (EN 374 or local equivalent) should be worn at all times when handling chemical products. For tasks involving physical or mechanical hazards, gloves should also comply with an approved physical standard (EN 388 or local equivalent).
Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties.
In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Personal Protective Equipment
General information : All personal protective equipment (PPE) should be selected and used under the direction of a trained health and safety professional. PPE should be in compliance with any relevant local or national standard.
Where no local or national standards apply, compliance with the relevant EU standard is recommended.
It remains the responsibility of the user to ensure that this product is used safely within the context of their site conditions.

Body Protection

Safety shoes complying with an approved standard (EN 20346 or equivalent) and a hard hat complying with an approved standard (EN 297 or equivalent) is required during loading and unloading of reactors, cleaning and maintenance operations and sampling.orn.
Other skin protection : Wear protective coveralls. For dusty tasks where dermal contact is possible a protective suit complying with an approved standard (EN 13982-1 Type 5 or equivalent) may be worn

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.

9. Physical and chemical properties

Properties	Description	Properties	Description
Form	Solid	**Colour**	Off-white. Tan.
Odour	Odourless.	**Decomposition Temperature**	Not available.
Melting Point	> 400°C.	**Boiling Point**	Not applicable.
Solubility	Soluble in the following materials: acids	**Solubility in Water**	0.0014g/l. insoluble in water.
pH	8 - 11	**Vapour Pressure**	Not applicable.
Vapour Density (Air=1)	Not applicable.	**Evaporation Rate**	Not applicable.
Physical State	[Solid beads, spheres]	**Odour Threshold**	Not applicable.
Viscosity	Not applicable.	**Partition Coefficient: n-octanol/water**	Not applicable.
Flash Point	Not applicable.	**Flammability**	(solid, gas): Not classified.
Auto-Ignition Temperature	Not applicable.	**Flammable Limits - Lower**	Not applicable.
Flammable Limits - Upper	Not applicable.	**Explosion Limit - Upper**	Not applicable.
Explosion Limit - Lower	Not applicable.	**Relative density**	2.2

Other Information

Bulk Density (g/ml) : 0.66 - 0.85

10. Stability and reactivity

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical Stability

The product is stable.

Conditions to Avoid

No specific data.

Incompatible materials

No specific data.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.
See Process Hazards section for hazards associated with the discharged material resulting from its intended use.

11. Toxicological Information

Toxicology Information

Acute toxicity:
Conclusion/Summary : Not classified.
Teratogenicity:
Conclusion/Summary : Not classified.
Information on likely routes of exposure:

Routes of entry anticipated: Dermal, Inhalation.
Symptoms related to the physical, chemical and toxicological characteristics
Eye contact: No specific data.
Inhalation: No specific data.
Skin contact: No specific data.
Ingestion: 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.
Numerical measures of toxicity
Acute toxicity estimates:
Not available.

Ingestion
Ingestion may cause irritation of the gastrointestinal tract.

Inhalation
Unlikely to be hazardous by inhalation unless present as a dust. High concentrations of dust may be irritant to the upper respiratory tract.
Dust may enter the lung and be slow to clear.

Skin
Repeated or prolonged skin contact may cause irritation. May cause physical abrasion in contact with skin.

Eye
Dust may cause irritation to eyes.

Skin corrosion/irritation
Conclusion/Summary : Not classified.

Serious eye damage/irritation
Conclusion/Summary : Not classified.

Mutagenicity
Conclusion/Summary : Not classified.

Respiratory Irritation
Conclusion/Summary : Not classified.

Respiratory sensitisation
Conclusion/Summary : Not classified.

Skin Sensitisation
Conclusion/Summary : Not classified.

Carcinogenicity
Conclusion/Summary : Not classified.

Reproductive Toxicity
Not available.
Conclusion/Summary : Not classified.

STOT-single exposure
Not available.

STOT-repeated exposure
Not available.

Aspiration Hazard
Not applicable.

Chronic Effects
Not available.
Conclusion/Summary : Not classified.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

12. Ecological information

Ecotoxicity
Conclusion/Summary : Not classified.

Persistence and degradability
Conclusion/Summary : The bioaccumulative criteria are not applicable to essential metals.

Mobility
Mobility in soil
Soil/water partition coefficient (KOC): Not available.

Bioaccumulative Potential
Product/ingredient name / LogPow / BCF / Potential
Zeolites - 0.59 to 0.95 low

Other Adverse Effects
No known significant effects or critical hazards.

13. Disposal considerations

Waste Disposal
Used material may have different hazards or properties from the new material. This safety data sheet does not apply to the used material.
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.

Container Disposal
Since the emptied container retains product residue, follow label warnings even after it has been emptied.

14. Transport information

U.N. Number
None Allocated

UN proper shipping name
None Allocated

Transport hazard class(es)
None Allocated

UN Number (Air Transport, ICAO)
NCAD

IATA/ICAO Proper Shipping Name
Not dangerous for conveyance under IATA code

IMDG UN No
NCAD

IMDG Proper Shipping Name
Not dangerous for conveyance under IMO/IMDG code

Special Precautions for User
Not applicable

Other Information
ADG
UN number: Not regulated.
Environmental hazards: No.
ADR/RID
UN number: Not regulated.
Environmental hazards: No.
IMDG
UN number: Not regulated.
Environmental hazards: No.
IATA
UN number: Not regulated.
Environmental hazards: No.
Transport in bulk according to Annex II of Marpol and the IBC Code: Not available.

15. Regulatory information

Regulatory information
Standard Uniform Schedule of Medicine and Poisons:
Not regulated.
Model Work Health and Safety Regulations - Scheduled Substances:
No listed substance
International regulations
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.
Chemical Weapon Convention List Schedules I, II & III Chemicals:
Not listed.
UNECE Aarhus Protocol on POPs and Heavy Metals:
Not listed.
International lists
National inventory
Canada : Not determined.
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan :
Japan inventory (ENCS): All components are listed or exempted.
Japan inventory (ISHL): Not determined.
Republic of Korea : All components are listed or exempted.
Malaysia : Not determined
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Taiwan : All components are listed or exempted.
United States : All components are listed or exempted.
Turkey : All components are listed or exempted.

Poisons Schedule
Not Scheduled

Australia (AICS)
All components are listed or exempted.

16. Other Information

References

Not available.

User Codes

User Title Label	User Codes
ExxonMobil HER Rating	3

Signature of Preparer/Data Service

Prepared by: Johnson Matthey Process Technologies Regulatory Affairs Department

Other Information

Safety Data Sheet Classification according to Model Work Health and Safety Regulations 2011 (WHS Regulations)
Version: 1
Key to abbreviations :
ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
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:
Not classified.
Indicates information that has changed from previously issued version.
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