SAFETY DATA SHEET



Version #: 01

Issue date: 26-April-2023

Revision date: -Supersedes date: -

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of the substance Low Sulphur Residue Identification number 68333-22-2 (CAS number) 01-2119485969-10-0013 Registration number

Synonyms None. SDS number 2020

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

Identified uses Distribution of a substance. Formulation and repackaging of substances and mixtures.

Manufacture. Use as a fuel.

Uses advised against All other uses. 1.3. Details of the supplier of the safety data sheet

Supplier

Company name Valero Energy (Ireland) Ltd

1st Floor, Block B

Address D22 X0Y3, Quarryvale

Ireland

Telephone 01/210 345 4593 (General information; US)

CorpHSE@valero.com e-mail Industrial Hygienist Contact person 0044/(0)18 65 407333 1.4. Emergency telephone

number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, inhalation H332 - Harmful if inhaled. Category 4 Carcinogenicity Category 1B H350 - May cause cancer.

Reproductive toxicity Category 2 H361d - Suspected of damaging

the unborn child.

Specific target organ toxicity - repeated

exposure

Category 2 (blood, thymus, liver)

H373 - May cause damage to organs (blood, thymus, liver) through prolonged or repeated

H400 - Very toxic to aquatic life.

exposure.

Aspiration hazard Category 1 H304 - May be fatal if swallowed

and enters airways.

Environmental hazards

Hazardous to the aquatic environment, acute Category 1

aquatic hazard

Hazardous to the aquatic environment, H410 - Very toxic to aquatic life Category 1 long-term aquatic hazard

with long lasting effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Residues (petroleum), atmospheric

Hazard pictograms



Signal word Danger

Hazard statements

H304 May be fatal if swallowed and enters airways.

H332 Harmful if inhaled. H350 May cause cancer.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P201 Obtain special instructions before use.
P260 Do not breathe mist/vapours.
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE/doctor.

P331 Do NOT induce vomiting.

Storage Not assigned.

Disposal Not assigned.

Supplemental information on

the label

EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards Hydrogen sulphide (H2S) can accumulate in the headspace of storage tanks and reach potentially

hazardous concentrations. This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII. The substance is not included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties. The substance is not considered to have endocrine disrupting properties in accordance with the criteria set out in Commission

Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. Substances

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Residues (petroleum), atmospheric	100	68333-22-2	01-2119485969-10-0013	-	

Classification: Acute Tox. 4;H332;(ATE: 11 mg/l), Carc. 1B;H350, Repr. 2;H361d, STOT

RE 2;H373, Asp. Tox. 1;H304, Aquatic Acute 1;H400, Aquatic

Chronic 1:H410

List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

M: M-factor

vPvB: very persistent and very bioaccumulative substance. PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Union workplace exposure limit(s).

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in

percent by volume.

SECTION 4: First aid measures

General information IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice

(show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in

attendance.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Call a poison centre or doctor/physician if you feel unwell.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed

Aspiration may cause pulmonary oedema and pneumonitis. Direct contact with eyes may cause temporary irritation. Prolonged exposure may cause chronic effects.

4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards

No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

procedures so without its

Specific methodsUse standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Wear appropriate personal protective equipment. Do not breathe mist/vapours.

For emergency responders

Keep unnecessary personnel away. Ensure adequate ventilation. Avoid inhalation of vapours and spray mists. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

The product is immiscible with water and will spread on the water surface. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labelled containers.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Before entering storage tanks and commencing any operation in a confined area check the atmosphere for oxygen content and flammability. (Subject to applicability) If sulphur compounds are suspected to be present in the product, check the atmosphere for H2S content. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapours. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

- E1 Hazardous to the Aquatic Environment Acute (Lower-tier requirements = 100 tonnes; Upper-tier requirements = 200 tonnes)

- E1 Hazardous to the Aquatic Environment Chronic (Lower-tier requirements = 100 tonnes; Upper-tier requirements = 200 tonnes)

7.3. Specific end use(s)Observe industrial sector guidance on best practices.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring

procedures

Follow standard monitoring procedures.

Derived no effect levels (DNELs)

General population

Product	Value	Assessment factor	Notes
Low Sulphur Residue (CAS 68333-22-2)			
Long-term, Systemic, Oral	0.015 mg/kg	40	Repeated dose toxicity
<u>Workers</u>			
Product	Value	Assessment factor	Notes
Low Sulphur Residue (CAS 68333-22-2)			
Long-term, Systemic, Dermal	0.065 mg/kg	36	developmental toxicity / teratogenicity
Long-term, Systemic, Inhalation	0.18 mg/m3	22.5	developmental toxicity / teratogenicity
Short-term, Systemic, Inhalation	4716.8 mg/m3	7.5	Acute toxicity
dicted no effect concentrations (PNECs)			
Product	Value	Assessment factor	Notes
Low Sulphur Residue (CAS 68333-22-2)			
Secondary poisoning	66.7 mg/kg		

8.2. Exposure controls

Appropriate engineering

controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen

according to the CEN standards and in discussion with the supplier of the personal protective

equipment.

Eye/face protection Wear safety glasses with side shields (or goggles). Eye protection should meet standard EN 166.

Skin protection

- Hand protection Wear suitable gloves tested to EN374. In full contact: Glove material: Nitrile rubber. Layer

thickness: 0.225 mm. Breakthrough time: >480 min. Splash contact: Glove material: Neoprene;

Layer thickness: 0.75 mm; Breakthrough time: 10-30 min.

Other Wear suitable protective clothing. Use of an impervious apron is recommended.

Respiratory protection In case of inadequate ventilation or risk of inhalation of oil mist, suitable respiratory equipment with

combination filter (type A2/P2) can be used.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Observe any medical surveillance requirements. Always observe good personal hygiene

measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove 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. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to

acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical stateLiquid.FormLiquid.ColourBlack.

Odour Mild Hydrocarbon or Rotten-egg.

Melting point/freezing point Not determined.

Boiling point or initial boiling 280 °C (536 °F)

point and boiling range

Flammability Will burn if involved in a fire.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) 1 % v/v

Explosive limit - upper 6 % v/v

(%)

Flash point > 200 °C (> 392 °F) Pensky-Martens Closed Cup

Auto-ignition temperature Not determined.

Decomposition temperature Not determined.

pH Not applicable.

Kinematic viscosity >= 6 - <= 55 mm²/s

Solubility

Solubility (water) Insoluble in water.

Partition coefficient Not determined.

(n-octanol/water) (log value)

Vapour pressure Not determined.

Density and/or relative density

Density > 840 - < 1100 kg/m³ (15 °C)

Vapour density Not determined.

Particle characteristics Not applicable.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No relevant additional information available.

9.2.2. Other safetyNo relevant additional information available.

characteristics

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stabilityMaterial is stable under normal conditions.

10.3. Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoidContact with incompatible materials.

10.5. Incompatible materials Strong oxidising agents.

10.6. Hazardous No hazardous decomposition products are known.

decomposition products

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation Harmful if inhaled.

Skin contactRepeated exposure may cause skin dryness or cracking. **Eye contact**Direct contact with eyes may cause temporary irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Symptoms Aspiration may cause pulmonary oedema and pneumonitis. Jaundice.

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

Acute toxicity

May be fatal if swallowed and enters airways. Harmful if inhaled. Hydrogen sulphide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulphide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odour does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.

Product Species Test Results

Residues (petroleum), atmospheric (CAS 68333-22-2)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg, 24 Hours

Inhalation

Aerosol

LC50 Rat 4100 mg/m3, 4 Hours

Oral

LD50 Female Rat 4320 mg/kg

Skin corrosion/irritation Serious eye damage/eye Repeated exposure may cause skin dryness or cracking. Based on available data, the classification criteria are not met.

irritation Respiratory sensitisation

Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met.

Germ cell mutagenicity Carcinogenicity

Skin sensitisation

May cause cancer.

Reproductive toxicity

Suspected of damaging the unborn child.

Specific target organ toxicity single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity -

repeated exposure

May be fatal if swallowed and enters airways. **Aspiration hazard**

Mixture versus substance

information

No information available.

11.2. Information on other hazards

Endocrine disrupting

properties

This substance does not have endocrine disrupting properties with respect to human health, as it

May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure.

does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No

2017/2100 and (EU) 2018/605.

Other information May be absorbed through the skin.

SECTION 12: Ecological information

12.1. Toxicity Very toxic to aquatic life with long lasting effects.

Test Results Product Species

Residues (petroleum), atmospheric (CAS 68333-22-2)

Aquatic

Acute

0.32 mg/l, 72 Hours EL50 Algae Algae Crustacea EL50 Daphnia 0.22 mg/l, 48 Hours Fish LL50 Fish 79 mg/l, 96 Hours

12.2. Persistence and

degradability

Expected to be inherently biodegradable.

12.3. Bioaccumulative potential

The product is not bioaccumulating.

Partition coefficient

Not available.

n-octanol/water (log Kow)

Bioconcentration factor (BCF) Not available. 12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB

This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII.

assessment

properties

12.6. Endocrine disrupting

This substance does not have endocrine disrupting properties with respect to the environment, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.

Low Sulphur Residue SDS Ireland

904058 Version #: 01 Revision date: -Issue date: 26-April-2023 Oil spills are generally hazardous to the environment. The product contains volatile organic compounds which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual wasteDispose in accordance with local regulations. Empty containers or liners may retain some product

residues. This material and its container must be disposed of in a safe manner (see: Disposal

instructions).

Contaminated packagingSince emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

EU waste code 13 07 03*

The Waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow

this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches

with chemical or used container. Dispose of contents/container in accordance with

local/regional/national/international regulations.

Special precautionsDispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number UN3082

14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Residues (petroleum),

name atmospheric)

14.3. Transport hazard class(es)

Class 9
Subsidiary risk Label(s) 9
Hazard No. (ADR) 90
Tunnel restriction code 14.4. Packing group III
14.5. Environmental hazards Yes

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

RID

14.1. UN number UN3082

14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Residues (petroleum),

name atmospheric)

14.3. Transport hazard class(es)

Class 9
Subsidiary risk Label(s) 9
14.4. Packing group III
14.5. Environmental hazards Yes

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

ADN

14.1. UN number UN3082

14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Residues (petroleum),

name atmospheric)

14.3. Transport hazard class(es)

Class 9
Subsidiary risk Label(s) 9
14.4. Packing group III
14.5. Environmental hazards Yes

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

IATA

14.1. UN number UN3082

14.2. UN proper shipping Environmentally hazardous substance, liquid, n.o.s. (Residues (petroleum), atmospheric)

name

14.3. Transport hazard class(es)

Class 9 Subsidiary risk -

14.4. Packing group III
14.5. Environmental hazards Yes
ERG Code 9L

14.6. Special precautions

for user

Read safety instructions, SDS and emergency procedures before handling.

IMDG

14.1. UN number UN3082

14.2. UN proper shipping ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Residues (petroleum),

name atmospheric)

14.3. Transport hazard class(es)
Class 9
Subsidiary risk 14.4. Packing group III

14.5. Environmental hazards

Marine pollutant

Yes

EmS

F-A, S-F

14.6. Special precautions Read safety instructions, SDS and emergency procedures before handling.

for user

14.7. Maritime transport in bulk Not applicable. However, this product is a liquid and if transported in bulk covered under

according to IMO instruments MARPOL 73/78, Annex I.

General information Shipping descriptions in this section are offered as examples only. Classification for transport must

accurately reflect the material hazards as designated under a variety of regulations and is solely

the responsibility of the person offering the material for transport into commerce.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended Residues (petroleum), atmospheric (CAS 68333-22-2)

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Residues (petroleum), atmospheric (CAS 68333-22-2)

Other EU regulations Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

E1 Hazardous to the Aquatic Environment AcuteE1 Hazardous to the Aquatic Environment Chronic

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP

Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation

(EC) No 1907/2006, as amended.

National regulations

According to Directive 92/85/EEC as amended, pregnant women should not work with the product,

if there is the least risk of exposure.

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at

work, in accordance with Directive 2004/37/EC, as amended.

15.2. Chemical safety assessment

Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland

Waterways.

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstract Service.

CEN: European Committee for Standardization. IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous

Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships.

PBT: Persistent, bioaccumulative and toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short term exposure limit. TWA: Time Weighted Average.

vPvB: Very persistent and very bioaccumulative.

References Chemical safety report.

CONCAWE

ECHA: European Chemical Agency.

Information on evaluation method leading to the classification of mixture

Not applicable.

Full text of any statements, which are not written out in full under sections 2 to 15

H304 May be fatal if swallowed and enters airways.

H332 Harmful if inhaled. H350 May cause cancer.

H361d Suspected of damaging the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects. Follow training instructions when handling this material.

Training information

Disclaimer

The information in this Safety Data Sheet (SDS) was obtained from sources believed to be reliable and accurate, and is not represented as being absolutely complete. The end user of this product has the responsibility for evaluating the adequacy of the data for the intended application and

conditions of use; for determining the safety, toxicity, regulatory requirements, and suitability of the product under these conditions; and for obtaining additional or clarifying data where uncertainty exists. The data serves as general guidance only, and is to be used in combination with professional judgement of persons experienced in a specific application, use or process; and

additional data may be required.