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

#### 1.1 Product identifier

Trade name : C7+ Gasoline Component

Product code : X2331, ZA771

Registration number EU : 01-2119486943-23-0002, 01-2119486943-23-0003, 01-

2119486943-23-0004, 01-2119486943-23-0006, 01-

2119486943-23-0007

Synonyms : Mixed Aromatics, Petroleum naptha

CAS-No. : 68527-23-1

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

Use of the Sub: : Chemical feedstock and component of motor gasoline. For

stance/Mixture use only in industrial processes.

Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Uses advised against : This product must not be used in applications other than the

above without first seeking the advice of the supplier.

# 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : Shell Chemicals Europe B.V.

PO Box 2334 3000 CH Rotterdam

Netherlands

Telephone : +31 (0)10 441 5137 / +31 (0)10 441 5191 Telefax : +31 (0)20 716 8316 / +31 (0)20 713 9230

Contact for Safety Data : sccmsds@shell.com

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#### 1.4 Emergency telephone number

+44 (0) 1235 239 670 (This telephone number is available 24 hours per day, 7 days per

week)

Vergiftungsinformationszentrale: +43 1 406 43 43

#### **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapour.

Skin irritation, Category 2 H315: Causes skin irritation.

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Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters air-

ways.

Germ cell mutagenicity, Category 1B H340: May cause genetic defects.

Carcinogenicity, Category 1A H350: May cause cancer.

Reproductive toxicity, Category 2 H361d: Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure, Category 3, Narcotic effects

H336: May cause drowsiness or dizziness.

Specific target organ toxicity - repeated

exposure, Category 2, Blood

, Blood-forming organs

, Peripheral nervous system

, Auditory system

, Immune system

, Respiratory system

, Visual system

, Central nervous system

Long-term (chronic) aquatic hazard, Cat- H411: Toxic to aquatic life with long lasting effects.

longed or repeated exposure.

egory 2

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :







H373: May cause damage to organs through pro-



Signal word : Danger

Hazard statements : PHYSICAL HAZARDS:

H225 Highly flammable liquid and vapour.

HEALTH HAZARDS:

H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

H340 May cause genetic defects.

H350 May cause cancer.

H361d Suspected of damaging the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs (Blood, Blood forming organs, Peripheral nervous system, Auditory system, Immune system, Respiratory system, Visual system, Central nervous

system) through prolonged or repeated exposure.

**ENVIRONMENTAL HAZARDS:** 

H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements : Prevention:

P202 Do not handle until all safety precautions have been

read and understood.

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking. P243 Take action to prevent static discharges.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

P273 Avoid release to the environment.

#### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/

attention.

P391 Collect spillage.

## Storage:

No precautionary phrases.

## Disposal:

No precautionary phrases.

## 2.3 Other hazards

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

In use, may form flammable/explosive vapour-air mixture.

This material is a static accumulator.

Even with proper grounding and bonding, this material can still accumulate an electrostatic charge.

If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur.

# **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

#### Components

|  | Chemical name | CAS-No. | Concentration (% w/w) |
|--|---------------|---------|-----------------------|
|--|---------------|---------|-----------------------|

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|                            | EC-No.     |        |
|----------------------------|------------|--------|
| naphtha (petroleum), light | 68527-23-1 | <= 100 |
| steam-cracked aromatic     | 271-264-4  |        |

## **Further information**

#### Contains:

| Chemical name         | Identification number    | Classification   | Concentration (% w/w) |
|-----------------------|--------------------------|--|-----------------------|
| Xylene, mixed isomers | 1330-20-7, 215-535-<br>7 | Flam. Liq.3; H226<br>Asp. Tox.1; H304<br>Acute Tox.4; H312<br>Skin Irrit.2; H315<br>Eye Irrit.2; H319<br>Acute Tox.4; H332<br>STOT SE3; H335<br>STOT RE2; H373<br>Aquatic Chronic3; H412 | 30 - 50               |
| Toluene               | 108-88-3, 203-625-9      | Flam. Liq.2; H225<br>Asp. Tox.1; H304<br>Skin Irrit.2; H315<br>STOT SE3; H336<br>Repr.2; H361d<br>STOT RE2; H373<br>Aquatic Chronic3; H412   | 30 - 50               |
| Benzene               | 71-43-2, 200-753-7       | Flam. Liq.2; H225<br>Asp. Tox.1; H304<br>Skin Irrit.2; H315<br>Eye Irrit.2; H319<br>Muta.1B; H340<br>Carc.1A; H350<br>STOT RE1; H372<br>Aquatic Chronic3; H412                           | < 1                   |

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice : Not expected to be a health hazard when used under normal

conditions.

Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

When administering first aid, ensure that you are wearing the

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appropriate personal protective equipment according to the incident, injury and surroundings.

If inhaled : Remove to fresh air. If rapid recovery does not occur,

transport to nearest medical facility for additional treatment.

In case of skin contact : Remove contaminated clothing. Immediately flush skin with

large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical

facility for additional treatment.

In case of eye contact : Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue

rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed : Call emergency number for your location / facility.

If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

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

**Symptoms** 

Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, lightheadedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.

Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.

No specific hazards under normal use conditions. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.

If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.

If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Other signs and symptoms of central nervous system (CNS) depression may include headache, nausea, and lack of coordination.

Damage to blood-forming organs may be evidenced by: a)

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fatigue and anaemia (RBC), b) decreased resistance to infection, and/or excessive bruising and bleeding (platelet effect). Auditory system effects may include temporary hearing loss and/or ringing in the ears.

Peripheral nerve damage may be evidenced by impairment of motor function (incoordination, unsteady walk, or muscle weakness in the extremities, and/or loss of sensation in the arms and legs).

Visual system disturbances may be evidenced by decreases

in the ability to discriminate between colours.

Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing,

and/or difficulty breathing.

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

Treatment : Call a doctor or poison control center for guidance.

Potential for chemical pneumonitis.

Treat symptomatically.

Potential for cardiac sensitisation, particularly in abuse situations. Hypoxia or negative inotropes may enhance these ef-

fects. Consider: oxygen therapy.

# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon diox-

ide, sand or earth may be used for small fires only.

Unsuitable extinguishing

media

Do not use water in a jet.

## 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Clear fire area of all non-emergency personnel. Hazardous combustion products may include:

A complex mixture of airborne solid and liquid particulates and

gases (smoke). Carbon monoxide.

Unidentified organic and inorganic compounds.

Flammable vapours may be present even at temperatures

below the flash point.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Will float and can be reignited on surface water.

#### 5.3 Advice for firefighters

Special protective equipment :

for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in

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a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

Further information : Keep adjacent containers cool by spraying with water.

## **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Observe all relevant local and international regulations.

Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

Local authorities should be advised if significant spillages

cannot be contained.

6.1.1 For non emergency personnel: Avoid contact with skin, eyes and clothing.

Isolate hazard area and deny entry to unnecessary or unpro-

tected personnel.

Do not breathe fumes, vapour. Do not operate electrical equipment. 6.1.2 For emergency responders:

Avoid contact with skin, eyes and clothing.

Isolate hazard area and deny entry to unnecessary or unpro-

tected personnel.

Do not breathe fumes, vapour. Do not operate electrical equipment.

## 6.2 Environmental precautions

Environmental precautions

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bond-

ing and grounding (earthing) all equipment. Monitor area with combustible gas indicator.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : For small liquid spills (< 1 drum), transfer by mechanical

means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove

contaminated soil and dispose of safely.

For large liquid spills (> 1 drum), transfer by mechanical

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means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely

Ventilate contaminated area thoroughly.

If contamination of site occurs remediation may require spe-

cialist advice.

#### 6.4 Reference to other sections

For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet., For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Technical measures : Avoid breathing of or direct contact with material. Only use in

well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this

material.

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

Advice on safe handling : Avoid inhaling vapour and/or mists.

Avoid contact with skin, eyes and clothing.

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Bulk storage tanks should be diked (bunded).

When using do not eat or drink.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Product Transfer : Even with proper grounding and bonding, this material can still

accumulate an electrostatic charge. If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable air-vapour mixtures can occur. Be aware of handling operations that may give rise to additional hazards that result from the accumulation of static charges. These include but are not limited to pumping (especially turbulent flow), mixing, filtering, splash filling, cleaning and filling of tanks and containers, sampling, switch loading, gauging, vacuum truck operations, and mechanical movements. These activities may lead to static discharge e.g. spark formation. Restrict line ve-

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locity during pumping in order to avoid generation of electrostatic discharge ( $\leq 1$  m/s until fill pipe submerged to twice its diameter, then  $\leq 7$  m/s). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Refer to guidance under Handling section.

Hygiene measures : Wash hands before eating, drinking, smoking and using the

toilet. Launder contaminated clothing before re-use. Do not ingest. If swallowed, then seek immediate medical assistance.

## 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Refer to section 15 for any additional specific legislation cov-

ering the packaging and storage of this product.

Storage class (TRGS 510) : 3, Flammable liquids

This is a regulation from Germany which does not constitute a

legal basis in Austria.

Further information on storage stability

Storage Temperature:

Ambient.

Bulk storage tanks should be diked (bunded).

Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of

strict procedures and precautions.

Must be stored in a diked (bunded) well- ventilated area, away from sunlight, ignition sources and other sources of heat. Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not

harmful or toxic to man or to the environment.

Electrostatic charges will be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to

reduce the risk.

The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flamma-

ble

Packaging material : Suitable material: For containers, or container linings use mild

steel, stainless steel., For container paints, use epoxy paint,

zinc silicate paint.

Unsuitable material: Avoid prolonged contact with natural,

butyl or nitrile rubbers.

Container Advice : Do not cut, drill, grind, weld or perform similar operations on or

near containers.

7.3 Specific end use(s)

Specific use(s) : Please refer to section 16 and/or the annexes for the regis-

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tered uses under REACH.

See additional references that provide safe handling practices for liquids that are determined to be static accumulators: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practices on Static Electricity).

IEC/TS 60079-32-1: Electrostatic hazards, guidance

# **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

#### **Occupational Exposure Limits**

| Components            | CAS-No.  | Value type (Form of exposure)                | Control parameters    | Basis   |
|-----------------------|--|--|-----------------------|---|
| Xylene, mixed isomers | 1330-20-7  | MAK-KZW                                      | 100 ppm<br>442 mg/m3  | AT OEL  |
| Xylene, mixed isomers |  | MAK-TMW                                      | 50 ppm<br>221 mg/m3   | AT OEL  |
| Toluene               | 108-88-3   | MAK-TMW                                      | 50 ppm<br>190 mg/m3   | AT OEL  |
|                       | Further inforr   | nation: Risk of skin a                       | bsorption             |   |
| Toluene               |  | MAK-KZW                                      | 100 ppm<br>380 mg/m3  | AT OEL  |
|                       | Further inforr   | nation: Risk of skin a                       | bsorption             |   |
| Toluene               |  | TWA  | 50 ppm<br>192 mg/m3   | 2006/15/EC  |
|                       | Further information: Indicative, Identifies the possibility of significant uptake through the skin |  |                       |   |
| Toluene               |  | STEL   | 100 ppm<br>384 mg/m3  | 2006/15/EC  |
|                       | Further information: Indicative, Identifies the possibility of significant uptake through the skin |  |                       |   |
| Benzene               | 71-43-2  | TRK-TMW                                      | 1 ppm<br>3,2 mg/m3    | AT OEL  |
|                       | Further inforr   | Further information: Risk of skin absorption |                       |   |
| Benzene               |  | TRK-KZW                                      | 4 ppm<br>12,8 mg/m3   | AT OEL  |
|                       | Further information: Risk of skin absorption   |  |                       |   |
| Benzene               |  | TWA  | 0,25 ppm<br>0,8 mg/m3 | Shell Internal<br>Standard<br>(SIS) for 8-12<br>hour TWA. |
| Benzene               |  | STEL   | 2,5 ppm<br>8 mg/m3    | Shell Internal<br>Standard<br>(SIS) for 15<br>min (STEL)  |

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#### **Biological occupational exposure limits**

|                       | •         |   |   |         |
|-----------------------|-----------|---|---|---------|
| Substance name        | CAS-No.   | Control parameters                          | Sampling time   | Basis   |
| Xylene, mixed isomers | 1330-20-7 | methyl hippuric<br>acid: 1,5 g/l<br>(Urine) | At the end of a<br>work week / at the<br>end of a work day /<br>at the end of a shift | VGÜ2014 |
|                       |           | xylene: 1 mg/l<br>(Blood)                   | End of workday  | VGÜ2014 |
| Toluene               | 108-88-3  | o-cresol: 0,8 mg/l<br>(Urine)               | At the end of a<br>work week / at the<br>end of a work day /<br>at the end of a shift | VGÜ2014 |
|                       |           | toluene: 250 μg/l<br>(Blood)                | End of workday  | VGÜ2014 |
| Benzene               | 71-43-2   | t,t-muconic acid:<br>1,6 mg/l<br>(Urine)    | At the end of a<br>work week / at the<br>end of a work day /<br>at the end of a shift | VGÜ2014 |

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

| Substance name                     | End Use | Exposure routes | Potential health effects   | Value      |
|------------------------------------|---------|-----------------|----------------------------|------------|
| C7+ Gasoline Component, 68527-23-1 | Workers | Dermal          | Long-term systemic effects | 23,4 mg/kg |
| C7+ Gasoline Component, 68527-23-1 | Workers | Inhalation      | Long-term systemic effects | 3,25 mg/m3 |

# Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

| Substance name Environmental Compartment |   | Environmental Compartment                        | Value |
|--|---|--|-------|
| Remarks:                                 | Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it |  | •     |
|  |   | ple to identify a single representative PNEC for |       |

## 8.2 Exposure controls

# **Engineering measures**

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. Use sealed systems as far as possible.

Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

Local exhaust ventilation is recommended.

Firewater monitors and deluge systems are recommended.

Eye washes and showers for emergency use.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

## General Information:

Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and

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suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when there is potential for inhalation; clear up spills immediately and dispose of wastes safely. Ensure safe systems of work or equivalent arrangements are in place to manage risks. Regularly inspect, test and maintain all control measures. Consider the need for risk based health surveillance.

## Personal protective equipment

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

: Wear goggles for use against liquids and gas. Eye protection

Wear full face shield if splashes are likely to occur.

Approved to EU Standard EN166.

Hand protection

Remarks Where hand contact with the product may occur the use of

gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: Viton.

Incidental contact/Splash protection: Nitrile rubber.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moistur-

izer is recommended.

Wear chemical resistant gloves/gauntlets and boots. Where Skin and body protection

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risk of splashing, also wear an apron.

Protective clothing approved to EU Standard EN14605.

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Wear antistatic and flame-retardant clothing, if a local risk

assessment deems it so.

Respiratory protection : If engineering controls do not maintain airborne concentra-

tions to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing appa-

ratus.

Where air-filtering respirators are suitable, select an appro-

priate combination of mask and filter.

If air-filtering respirators are suitable for conditions of use: Select a filter suitable for organic gases and vapours [Type A

boiling point > 65°C (149°F)] meeting EN14387.

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : colourless

Odour : aromatic

Odour Threshold : Data not available

Melting / freezing point : -50 °C

Boiling point/boiling range : 100 - 205 °C

Flammability

Flammability (solid, gas) : Not applicable

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit /

upper flammability limit

8 %(V)

Lower explosion limit /

Lower flammability limit

1 %(V)

Flash point : < 0 °C

Auto-ignition temperature : > 225 °C

Decomposition temperature

Decomposition tempera: Data not available

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ture

pH : Not applicable

Viscosity

Viscosity, dynamic : ca. 1 mPa.s (25 °C)

Method: ASTM D445

Viscosity, kinematic : Data not available

Solubility(ies)

Water solubility : Data not available

Partition coefficient: n-

octanol/water

log Pow: 2,1 - 6,7

Vapour pressure : Typical < 7 kPa (37,8 °C)

Relative density : Data not available

Density : Typical 860 - 870 kg/m3 (20 °C)

Method: ASTM D4052

Relative vapour density : 3,3

9.2 Other information

Explosive properties : Not applicable

Oxidizing properties : Data not available

Evaporation rate : Data not available

Conductivity: < 100 pS/m

The conductivity of this material makes it a static accumulator., A liquid is typically considered nonconductive if its con-

ductivity is below 100 pS/m and is considered semi-

conductive if its conductivity is below 10,000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives

can greatly influence the conductivity of a liquid

Surface tension : Data not available

Molecular weight : Not applicable

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## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

## 10.2 Chemical stability

No hazardous reaction is expected when handled and stored according to provisions Stable under normal conditions of use.

## 10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with strong oxidising agents.

#### 10.4 Conditions to avoid

Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.

In certain circumstances product can ignite due to static elec-

tricity.

#### 10.5 Incompatible materials

Materials to avoid Strong oxidising agents.

## 10.6 Hazardous decomposition products

Hazardous decomposition products are not expected to form during normal storage.

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

## **SECTION 11: Toxicological information**

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

Information on likely routes of: exposure

Exposure may occur via inhalation, ingestion, skin absorption,

skin or eye contact, and accidental ingestion.

#### **Acute toxicity**

#### **Product:**

LD 50 (Rat, male and female): > 5.000 mg/kg Acute oral toxicity

Method: Other guideline method.

Remarks: Based on available data, the classification criteria

are not met.

Acute inhalation toxicity LC 50 (Rat, male and female): > 20 mg/l

> Exposure time: 4 h Test atmosphere: vapour

Method: Test(s) equivalent or similar to OECD Test Guideline

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Remarks: Based on available data, the classification criteria

are not met.

Acute dermal toxicity : LD 50 (Rabbit, male and female): > 2.000 mg/kg

Method: Other guideline method.

Remarks: Based on available data, the classification criteria

are not met.

#### **Components:**

### naphtha (petroleum), light steam-cracked aromatic:

Acute oral toxicity : LD 50 (Rat, male and female): > 5.000 mg/kg

Method: Other guideline method.

Remarks: Based on available data, the classification criteria

are not met.

Acute inhalation toxicity : LC 50 (Rat, male and female): > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: Test(s) equivalent or similar to OECD Test Guideline

403

Remarks: Based on available data, the classification criteria

are not met.

Acute dermal toxicity : LD 50 (Rabbit, male and female): > 2.000 mg/kg

Method: Other guideline method.

Remarks: Based on available data, the classification criteria

are not met.

# Skin corrosion/irritation

Product:

Species : Rabbit

Method : OECD Test Guideline 404
Remarks : Causes skin irritation.

#### **Components:**

# naphtha (petroleum), light steam-cracked aromatic:

Species : Rabbit

Method : OECD Test Guideline 404 Remarks : Causes skin irritation.

#### Serious eye damage/eye irritation

Product:

Species : Rabbit

Method : Other guideline method.

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

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#### **Components:**

### naphtha (petroleum), light steam-cracked aromatic:

Species : Rabbit

Method : Other guideline method.

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

#### Respiratory or skin sensitisation

**Product:** 

Species : Guinea pig

Method : Other guideline method.

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

## **Components:**

#### naphtha (petroleum), light steam-cracked aromatic:

Species : Guinea pig

Method : Other guideline method.

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

## Germ cell mutagenicity

**Product:** 

Genotoxicity in vitro : Method: Test(s) equivalent or similar to OECD Guideline 471

Remarks: May cause genetic defects.

Method: Test(s) equivalent or similar to OECD Test Guideline

473

Remarks: May cause genetic defects.

Genotoxicity in vivo : Species: Mouse

Method: OECD Test Guideline 474

Remarks: May cause heritable genetic damage

Germ cell mutagenicity- As-

sessment

: May cause genetic defects.

#### **Components:**

# naphtha (petroleum), light steam-cracked aromatic:

Genotoxicity in vitro : Method: Test(s) equivalent or similar to OECD Guideline 471

Remarks: May cause genetic defects.

Method: Test(s) equivalent or similar to OECD Test Guideline

473

Remarks: May cause genetic defects.

Genotoxicity in vivo : Species: Mouse

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Method: OECD Test Guideline 474

Remarks: May cause heritable genetic damage

Germ cell mutagenicity- As-

sessment

May cause genetic defects.

# Carcinogenicity

**Product:** 

Species : Rat, male and female

Application Route : Oral

Method : Other guideline method. Remarks : May cause cancer.

Known human carcinogen.

Contains benzene.

Causes leukaemia (AML - acute myelogenous leukaemia).

Species : Rat, male and female

Application Route : Inhalation

Method : Test(s) equivalent or similar to OECD Test Guideline 453

Remarks : May cause cancer.

Known human carcinogen.

Contains benzene.

Causes leukaemia (AML - acute myelogenous leukaemia).

Carcinogenicity - Assess-

ment

May cause cancer.

## **Components:**

# naphtha (petroleum), light steam-cracked aromatic:

Species : Rat, male and female

Application Route : Oral

Method : Other guideline method. Remarks : May cause cancer.

Known human carcinogen.

Contains benzene.

Causes leukaemia (AML - acute myelogenous leukaemia).

Species : Rat, male and female

Application Route : Inhalation

Method : Test(s) equivalent or similar to OECD Test Guideline 453

Remarks : May cause cancer.

Known human carcinogen.

Contains benzene.

Causes leukaemia (AML - acute myelogenous leukaemia).

Carcinogenicity - Assess-

ment

: May cause cancer.

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| Material  | GHS/CLP Carcinogenicity Classification |
|---|--|
| naphtha (petroleum), light steam-cracked aromatic | Carcinogenicity Category 1A            |
| Xylene, mixed isomers                             | No carcinogenicity classification.     |
| Toluene   | No carcinogenicity classification.     |
| Benzene   | Carcinogenicity Category 1A            |

| Material  | Other Carcinogenicity Classification                                |
|---|---|
| naphtha (petroleum), light steam-cracked aromatic | IARC: Group 2B: Possibly carcinogenic to humans                     |
| Xylene, mixed isomers                             | IARC: Group 3: Not classifiable as to its carcinogenicity to humans |
| Toluene   | IARC: Group 3: Not classifiable as to its carcinogenicity to humans |
| Benzene   | IARC: Group 1: Carcinogenic to humans                               |

# Reproductive toxicity

**Product:** 

Effects on fertility

Remarks: Suspected of damaging fertility or the unborn child.

Reproductive toxicity - As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

#### Components:

#### naphtha (petroleum), light steam-cracked aromatic:

Effects on fertility

Remarks: Suspected of damaging fertility or the unborn child.

Reproductive toxicity - As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

# STOT - single exposure

**Product:** 

Exposure routes : Inhalation

Target Organs : Central nervous system

Remarks : May cause drowsiness or dizziness.

Inhalation of vapours or mists may cause irritation to the res-

piratory system.

Vapours may cause drowsiness and dizziness.

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## **Components:**

## naphtha (petroleum), light steam-cracked aromatic:

Exposure routes : Inhalation

Target Organs : Central nervous system

Remarks : May cause drowsiness or dizziness.

Inhalation of vapours or mists may cause irritation to the res-

piratory system.

Vapours may cause drowsiness and dizziness.

#### STOT - repeated exposure

**Product:** 

Exposure routes : Oral

Target Organs : Blood, Blood-forming organs, Peripheral nervous system,

Auditory system, Immune system, Respiratory system, Visual

system, Central nervous system

Remarks : May cause damage to organs or organ systems through pro-

longed or repeated exposure.

#### Components:

## naphtha (petroleum), light steam-cracked aromatic:

Exposure routes : Oral

Target Organs : Blood, Blood-forming organs, Peripheral nervous system,

Auditory system, Immune system, Respiratory system, Visual

system, Central nervous system

Remarks : May cause damage to organs or organ systems through pro-

longed or repeated exposure.

# Repeated dose toxicity

**Product:** 

Species : Rat, male and female

Application Route : Oral

Method : Test(s) equivalent or similar to OECD Test Guideline 408

Target Organs : hematopoietic system

Species : Rat, male and female

Application Route : Inhalation Test atmosphere : vapour

Method : Test(s) equivalent or similar to OECD Test Guideline 413

Target Organs : No specific target organs noted

Species : Rabbit, female

Application Route : Dermal

Method : Test(s) equivalent or similar to OECD Test Guideline 410

Target Organs : No specific target organs noted

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## **Components:**

# naphtha (petroleum), light steam-cracked aromatic:

Species : Rat, male and female

Application Route : Oral

Method : Test(s) equivalent or similar to OECD Test Guideline 408

Target Organs : hematopoietic system

Species : Rat, male and female

Application Route : Inhalation Test atmosphere : vapour

Method : Test(s) equivalent or similar to OECD Test Guideline 413

Target Organs : No specific target organs noted

Species : Rabbit, female

Application Route : Dermal

Method : Test(s) equivalent or similar to OECD Test Guideline 410

Target Organs : No specific target organs noted

#### **Aspiration toxicity**

#### **Product:**

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

#### **Components:**

#### naphtha (petroleum), light steam-cracked aromatic:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### **Further information**

**Product:** 

Remarks : Classifications by other authorities under varying regulatory

frameworks may exist.

Remarks : Unless indicated otherwise, the data presented is representa-

tive of the product as a whole, rather than for individual com-

ponent(s).

According to EC No 1907/2006 as amended as at the date of this SDS

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## **Components:**

naphtha (petroleum), light steam-cracked aromatic:

Remarks : Classifications by other authorities under varying regulatory

frameworks may exist.

## **SECTION 12: Ecological information**

# 12.1 Toxicity

**Product:** 

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1,2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (algae)): 1,3 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to fish (Chronic tox-

icity)

Remarks: Data not available

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

Remarks: Data not available

Toxicity to microorganisms : LL50 (Tetrahymena pyriformis): 76,7 mg/l

Exposure time: 72 h

Method: Based on quantitative structure-activity relationship

(QSAR) modelling Remarks: Harmful

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

#### **Components:**

#### naphtha (petroleum), light steam-cracked aromatic:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

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Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1,2 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (algae)): 1,3 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 201

Remarks: Toxic

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to microorganisms : LL50 (Tetrahymena pyriformis): 76,7 mg/l

Exposure time: 72 h

Method: Based on quantitative structure-activity relationship

(QSAR) modelling Remarks: Harmful

 $LL/EL/IL50 > 1 \le 10 \text{ mg/l}$ 

Toxicity to fish (Chronic tox-

icity)

Remarks: Data not available

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

Remarks: Data not available

# 12.2 Persistence and degradability

**Product:** 

Biodegradability : Biodegradation: 7,3 %

Exposure time: 28 d

Method: OECD Test Guideline 301F Remarks: Not readily biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

## **Components:**

naphtha (petroleum), light steam-cracked aromatic:

Biodegradability : Biodegradation: 7,3 %

Exposure time: 28 d

Method: OECD Test Guideline 301F Remarks: Not readily biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

## 12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Species: Pimephales promelas (fathead minnow)

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Bioconcentration factor (BCF): 0,73 - 4,15

Method: Based on quantitative structure-activity relationship

(QSAR) modelling

Remarks: Contains components with the potential to bioaccumulate.

#### **Components:**

#### naphtha (petroleum), light steam-cracked aromatic:

Bioaccumulation : Species: Pimephales promelas (fathead minnow)

Bioconcentration factor (BCF): 0,73 - 4,15

Method: Based on quantitative structure-activity relationship

(QSAR) modelling

Remarks: Contains components with the potential to bioaccumulate.

#### 12.4 Mobility in soil

## **Product:**

Mobility : Remarks: Floats on water., If product enters soil, one or more

constituents will be highly mobile and may contaminate

groundwater.

#### **Components:**

#### naphtha (petroleum), light steam-cracked aromatic:

Mobility : Remarks: Floats on water., If product enters soil, one or more

constituents will be highly mobile and may contaminate

groundwater.

## 12.5 Results of PBT and vPvB assessment

## **Product:**

Assessment : The substance does not fulfill all screening criteria for persis-

tence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB..

#### **Components:**

#### naphtha (petroleum), light steam-cracked aromatic:

Assessment : The substance does not fulfill all screening criteria for persis-

tence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB..

#### 12.6 Endocrine disrupting properties

# **Product:**

Assessment : The substance/mixture does not contain components considered to

have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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#### 12.7 Other adverse effects

# **Product:**

Additional ecological infor-

mation

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

**Product** 

Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations

ods in compliance with applicable regulations.

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Do not dispose into the environment, in drains or in water courses.

Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Waste, spills or used product is dangerous waste.

Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or national requirements and must be complied with.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Contaminated packaging

Drain container thoroughly.

After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture,

cut or weld uncleaned drums.

Send to drum recoverer or metal reclaimer.

Comply with any local recovery or waste disposal regulations.

# **SECTION 14: Transport information**

## 14.1 UN number or ID number

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ADN : 1268
ADR : 1268
RID : 1268
IMDG : 1268
IATA : 1268

14.2 UN proper shipping name

**ADN** : PETROLEUM DISTILLATES, N.O.S.

(NAPHTHA, pD50 <=110 kPa)

ADR : PETROLEUM DISTILLATES, N.O.S.

RID : PETROLEUM DISTILLATES, N.O.S.

IMDG : PETROLEUM DISTILLATES, N.O.S.

(NAPHTHA)

**IATA** : Petroleum distillates, n.o.s.

14.3 Transport hazard class(es)

ADN : 3
ADR : 3
RID : 3
IMDG : 3
IATA : 3

14.4 Packing group

**ADN** 

Packing group : II Classification Code : F1

Labels : 3 (N2, CMR, F)

**ADR** 

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

**RID** 

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

Remarks : SP640CD: Special provision 640D

**IMDG** 

Packing group : II Labels : 3

**IATA** 

Packing group : II Labels : 3

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#### 14.5 Environmental hazards

ADN

Environmentally hazardous : yes

**ADR** 

Environmentally hazardous : yes

**RID** 

Environmentally hazardous : yes

**IMDG** 

Marine pollutant : yes

14.6 Special precautions for user

Remarks : Special Precautions: Refer to Section 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

#### 14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex 1 rules apply for bulk shipments by sea.

#### **SECTION 15: Regulatory information**

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

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Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a)

to (d)

Water hazard class (Germa-

WGK 3 highly hazardous to water

ny)

Remarks: Code Number: 9162, Classification according to

AwSV

# Other regulations:

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Take note the of Children and Youth Employment Law (KJBG).

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Take note of Law on the protection of mothers at work (Maternity Protection Act – MSchG)

Product is subject to Gewerbeordnung (GewO) covering among others the requirements of the Seveso III directive (2012/18/EU).

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

#### **SECTION 16: Other information**

#### Full text of other abbreviations

2006/15/EC Europe. Indicative occupational exposure limit values AT OEL Austria. Limit values regulation - Annex I: Substance list VGÜ2014

Austria. Regulation on health surveillance in the workplace

2006/15/EC / TWA Limit Value - eight hours Short term exposure limit 2006/15/EC / STEL Time Weighted Average AT OEL / MAK-TMW : Short Term Exposure Limit AT OEL / MAK-KZW AT OEL / TRK-TMW Time Weighted Average AT OEL / TRK-KZW : Short Term Exposure Limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals: OECD - Organization for Economic Co-operation and Development: OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous

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Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Further information** 

Training advice : Provide adequate information, instruction and training for op-

erators.

Other information : For Industry guidance and tools on REACH please visit the

CEFIC website at http://cefic.org/Industry-support.

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB.

A vertical bar (|) in the left margin indicates an amendment

from the previous version.

Sources of key data used to compile the Safety Data

Sheet

The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

Identified Uses according to the Use Descriptor System

**Uses - Worker** 

Title : Manufacture of substance

- Industrial

**Uses - Worker** 

Title : Use as an intermediate

- Industrial

**Uses - Worker** 

Title : Distribution of substance

Industrial

**Uses - Worker** 

Title : Formulation & (re)packing of substances and mixtures

- Industrial

Uses - Worker

Title : Use as a fuel

- Industrial

**Uses - Worker** 

Title : Use as a fuel

- Professional

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# **C7+ Gasoline Component**

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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.

AT / EN

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# **C7+ Gasoline Component**

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**Exposure Scenario - Worker** 

| 30000000139      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Manufacture of substance- Industrial  |
| Use Descriptor   | Sector of Use: SU3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 8a, PROC 8b, PROC 15 Environmental Release Categories: ERC1   |
| Scope of process | Manufacture of the substance or use as a process chemical or extraction agent within closed or contained systems. Includes incidental exposures during recycling/ recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container). |

| SECTION 2  | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |  |  |
|--|---|--|--|
| Section 2.1  | Control of Worker Exposure  |  |  |
| Product Characteristics  |   |  |  |
| Physical form of product   | Liquid, vapour pressure 0.5 - 10 kPa at STP   |  |  |
| Concentration of the Sub-  | Covers use of substance/product up to 100% (unless stated   |  |  |
| stance in Mixture/Article  | differently).,  |  |  |
| Frequency and Duration of  | Use   |  |  |
| Covers daily exposures up to   | 8 hours (unless stated differently).  |  |  |
| Other Operational Conditio   | ns affecting Exposure   |  |  |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). |   |  |  |
| Assumes a good basic standard of occupational hygiene is implemented.                    |   |  |  |
| Contributing Scenarios   | Risk Management Measures  |  |  |
| General measures (carcinogens).  | Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenarios; clear up spills immediately and maintain all control measures. Consider the need for risk based health surveillance. |  |  |
| General measures (skin irritants).   | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if  |  |  |

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| _   | 1   |                       |  |  |
|---|---|-----------------------|--|--|
|   | hand contact with substance likely. Clea                    |                       |  |  |
| tion/spills as soon as they occur. Wash off any skin contar   |   |                       |  |  |
| nation immediately. Provide basic employee training to provide basic employee training |   |                       |  |  |
|   | vent / minimise exposures and to report any skin problems   |                       |  |  |
|   | that may develop.   |                       |  |  |
| General exposures (closed   | No other specific measures identified.                      |                       |  |  |
| systems)  |   |                       |  |  |
| General exposures (closed   | Handle substance within a closed system                     |                       |  |  |
| systems)with sample col-  | Sample via a closed loop or other syster                    | n to avoid exposure   |  |  |
| lectionGeneral measures   |   |                       |  |  |
| (skin irritants).Outdoor  |   |                       |  |  |
| General exposures (closed   | Handle substance within a closed system                     |                       |  |  |
| systems)Use in contained  | Ensure operation is undertaken outdoors                     | 3.                    |  |  |
| batch processes   | Sample via a closed loop or other eveter                    | n to avaid avaccure   |  |  |
| Process sampling  | Sample via a closed loop or other system                    | ii to avoid exposure  |  |  |
| Laboratory activities   | Handle within a fume cupboard or implement suitable equiva- |                       |  |  |
|   | lent methods to minimise exposure.                          |                       |  |  |
| Bulk transfers(closed sys-  | Ensure material transfers are under containment or extract  |                       |  |  |
| tems)   | ventilation.  |                       |  |  |
| Equipment cleaning and  | Drain down and flush system prior to equipment opening or   |                       |  |  |
| maintenance   | maintenance.  |                       |  |  |
|   | Clear spills immediately.                                   |                       |  |  |
|   | Retain drain downs in sealed storage pe                     | nding disposal or for |  |  |
|   | subsequent recycle.   |                       |  |  |
| Storage.General measures  | Store substance within a closed system.                     |                       |  |  |
| (skin irritants).Outdoor  | Sample via a closed loop or other system to avoid exposure  |                       |  |  |
| Section 2.2   | Control of Environmental Exposure                           |                       |  |  |
| Substance is complex UVCB   | ·   |                       |  |  |
| Predominantly hydrophobic.  | •   |                       |  |  |
| Not readily biodegradable.  |   |                       |  |  |
| Amounts Used  |   |                       |  |  |
| Fraction of EU tonnage used   | in region:  | 0,1                   |  |  |
| Regional use tonnage (tonne   |   | 5,0E+05               |  |  |
| Fraction of Regional tonnage  |   | 1                     |  |  |
| Annual site tonnage (tonnes/  | 5,0E+05   |                       |  |  |
| Maximum daily site tonnage  | 1,7E+06   |                       |  |  |
| Frequency and Duration of Use   |   |                       |  |  |
| Continuous release.   |   |                       |  |  |
| Emission Days (days/year):  |   | 300                   |  |  |
| <b>Environmental factors not</b>  | influenced by risk management                               |                       |  |  |
| Local freshwater dilution fact  | or:   | 40                    |  |  |
| Local marine water dilution fa  |   | 100                   |  |  |
|   | ns affecting Environmental Exposure                         |                       |  |  |
| Release fraction to air from process (initial release prior to RMM): 1,0E-05  |   |                       |  |  |
| Release fraction to wastewater from process (initial release prior to 5,0E-06   |   |                       |  |  |

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| RMM):   |                  |
|---|------------------|
| Release fraction to soil from process (initial release prior to RMM):         | 1,0E-04          |
| Technical conditions and measures at process level (source) to pro-           | event release    |
| Common practices vary across sites thus conservative process re-              |                  |
| lease estimates used.   |                  |
| Technical onsite conditions and measures to reduce or limit disch             | arges, air emis- |
| sions and releases to soil  |                  |
| Risk from environmental exposure is driven by humans via indirect             |                  |
| exposure (primarily ingestion).   |                  |
| If discharging to domestic sewage treatment plant, no secondary               |                  |
| wastewater treatment required.  |                  |
| Prevent discharge of undissolved substance to or recover from onsite          |                  |
| wastewater.   |                  |
| Treat air emission to provide a typical removal efficiency of (%)             | 90               |
| Treat onsite wastewater (prior to receiving water discharge) to provide       | 0                |
| the required removal efficiency of >= (%)                                     |                  |
| If discharging to domestic sewage treatment plant, no secondary               | 0                |
| wastewater treatment required.  |                  |
| Organisational measures to prevent/limit release from site                    |                  |
| Do not apply industrial sludge to natural soils.                              |                  |
| Sludge should be incinerated, contained or reclaimed.                         |                  |
| Conditions and Measures related to municipal sewage treatment p               | lant             |
| Estimated substance removal from wastewater via domestic sewage treatment (%) | 95,0             |
| Total efficiency of removal from wastewater after onsite and offsite          | 95,0             |
| (domestic treatment plant) RMMs (%)   |                  |
| Maximum allowable site tonnage (MSafe) based on release following             | 1,8E+06          |
| total wastewater treatment removal (kg/d)                                     |                  |
| Assumed domestic sewage treatment plant flow (m3/d)                           | 10.000           |
| Conditions and Measures related to external treatment of waste for            | r disposal       |
| During manufacturing no waste of the substance is generated.                  |                  |
| Conditions and measures related to external recovery of waste                 |                  |
| During manufacturing no waste of the substance is generated.                  |                  |
|   |                  |

| SECTION 3   | EXPOSURE ESTIMATION |  |  |  |
|---|---------------------|--|--|--|
| Section 3.1 - Health  |                     |  |  |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |                     |  |  |  |

## Section 3.2 - Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |  |
|-----------|---------------------------------------|--|
|           | EXPOSURE SCENARIO                     |  |

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## Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

Risk Management Measures are based on qualitative risk characterisation.

#### **Section 4.2 - Environment**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org).

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**Exposure Scenario - Worker** 

| Exposure Scenario - Work |  |  |
|--------------------------|--|--|
| 3000000138               |  |  |
|                          |  |  |
| SECTION 1                | EXPOSURE SCENARIO TITLE  |  |
| Title                    | Use as an intermediate- Industrial   |  |
| Use Descriptor           | Sector of Use: SU3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 8a,  |  |
|                          |  |  |
|                          | PROC 8b, PROC 15   |  |
|                          | Environmental Release Categories: ERC6a  |  |
|                          |  |  |
| Scope of process         | Use of substance as an intermediate within closed or contained systems (not related to Strictly Controlled Conditions). Includes incidental exposures during recycling/recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container). |  |

| SECTION 2                          | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |  |
|------------------------------------|---|--|
| Section 2.1                        | Control of Worker Exposure  |  |
| Product Characteristics            |   |  |
| Physical form of product           | Liquid, vapour pressure 0.5 - 10 kPa at STP   |  |
| Concentration of the Sub-          | Covers use of substance/product up to 100% (unless stated   |  |
| stance in Mixture/Article          | differently).,  |  |
| Frequency and Duration of          | Use   |  |
| Covers daily exposures up to       | 8 hours (unless stated differently).  |  |
| <b>Other Operational Conditio</b>  | ns affecting Exposure   |  |
| Assumes a good basic stand         | an 20°C above ambient temperature (unless stated differently).  ard of occupational hygiene is implemented.   |  |
| Contributing Scenarios             | Risk Management Measures  |  |
| General measures (carcinogens).    | Risk Management Measures  Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenarios; clear up spills immediately and maintain all control measures. Consider the need for risk based health surveillance. |  |
| General measures (skin irritants). | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if  |  |

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|  | hand contact with substance likely. Cleation/spills as soon as they occur. Wash nation immediately. Provide basic employent / minimise exposures and to report that may develop.  | off any skin contami-<br>byee training to pre- |
|--|---|--|
| General exposures (closed systems)   | No other specific measures identified.  |  |
| General exposures (closed systems) with sample collection General measures (skin irritants). Outdoor | Handle substance within a closed system. Sample via a closed loop or other system to avoid exposure   |  |
| General exposures (closed systems)Use in contained batch processes                                   | Handle substance within a closed system. Ensure operation is undertaken outdoors.   |  |
| Process sampling   | Sample via a closed loop or other syste   | m to avoid exposure                            |
| Laboratory activities  | Handle within a fume cupboard or implement suitable equivalent methods to minimise exposure.  |  |
| Bulk transfers(closed systems)   | Ensure material transfers are under containment or extract ventilation.   |  |
| Equipment cleaning and maintenance   | Drain down and flush system prior to equipment opening or maintenance. Clear spills immediately. Retain drain downs in sealed storage pending disposal or for subsequent recycle. |  |
| Storage.General measures (skin irritants).Outdoor  | Store substance within a closed system. Sample via a closed loop or other system to avoid exposure  |  |
| Section 2.2  | Control of Environmental Exposure   |  |
| Substance is complex UVCB  | ·   |  |
| Predominantly hydrophobic.   |   |  |
| Not readily biodegradable.   |   |  |
| Amounts Used   |   |  |
| Fraction of EU tonnage used  | in region:  | 0,1  |
| Regional use tonnage (tonne  |   | 1,5E+05  |
| Fraction of Regional tonnage   |   | 0,1  |
| Annual site tonnage (tonnes/   |   | 1,5E+04  |
| Maximum daily site tonnage   |   | 5,0E+04  |
| Frequency and Duration of Use  |   | 1 /  |
| Continuous release.  |   |  |
| Emission Days (days/year):   |   | 300  |
|  | influenced by risk management   | ·  |
| Local freshwater dilution factor:  |   | 10   |
| Local marine water dilution factor: 100  |   |  |
| Other Operational Condition  | ns affecting Environmental Exposure   |  |
| Release fraction to air from process (initial release prior to RMM):                                 |   | 5,0E-05  |
| Release fraction to wastewat   | er from process (initial release prior to   | 1,0E-05  |

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| Release fraction to soil from process (initial release prior to RMM):                                    | 1,0E-03          |
|--|------------------|
| Technical conditions and measures at process level (source) to p   |                  |
| Common practices vary across sites thus conservative process re-   |                  |
| lease estimates used.  |                  |
| Technical onsite conditions and measures to reduce or limit disc   | harges, air emis |
| sions and releases to soil   |                  |
| Risk from environmental exposure is driven by humans via indirect  |                  |
| exposure (primarily ingestion).  |                  |
| If discharging to domestic sewage treatment plant, no secondary  |                  |
| wastewater treatment required.   |                  |
| Prevent discharge of undissolved substance to or recover from onsite                                     |                  |
| wastewater.  |                  |
| Treat air emission to provide a typical removal efficiency of (%)  | 80               |
| Treat onsite wastewater (prior to receiving water discharge) to provide                                  | 0                |
| the required removal efficiency of >= (%)  |                  |
| Organisational measures to prevent/limit release from site   |                  |
| Do not apply industrial sludge to natural soils.   |                  |
| Sludge should be incinerated, contained or reclaimed.  |                  |
| Conditions and Measures related to municipal sewage treatment  | plant            |
| Estimated substance removal from wastewater via domestic sewage  | 95,0             |
| treatment (%)  |                  |
| Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%) | 95,0             |
| Maximum allowable site tonnage (MSafe) based on release following  | 1,8E+05          |
| total wastewater treatment removal (kg/d)  |                  |
| Assumed domestic sewage treatment plant flow (m3/d)  | 2.000            |
| Conditions and Measures related to external treatment of waste f   | or disposal      |
| This substance is consumed during use and no waste of substance is                                       |                  |
| Conditions and measures related to external recovery of waste  |                  |
|  |                  |

| SECTION 3  | EXPOSURE ESTIMATION |  |
|--|---------------------|--|
| Section 3.1 - Health   |                     |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise |                     |  |
| indicated.   |                     |  |

### Section 3.2 -Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

| SECTION 4   | GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO |
|---|---|
| Section 4.1 - Health  |   |
| Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management |   |

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Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

Risk Management Measures are based on qualitative risk characterisation.

### Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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**Exposure Scenario - Worker** 

**SECTION 2** 

| Exposure Scenario - Worker |  |
|----------------------------|--|
| 30000000140                |  |
| SECTION 1                  | EXPOSURE SCENARIO TITLE  |
| Title                      | Distribution of substance- Industrial  |
| Use Descriptor             | Sector of Use: SU3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 8a, PROC 8b, PROC 15 Environmental Release Categories: ERC1, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC6b, ERC 6C,, ERC7   |
| Scope of process           | Bulk loading (including marine vessel/barge, rail/road car and IBC loading) of substance within closed or contained systems, including incidental exposures during its sampling, storage, unloading, maintenance and associated laboratory activities. |

**OPERATIONAL CONDITIONS AND RISK MANAGEMENT** 

| 020110112   | MEASURES  |  |
|---|---|--|
| Section 2.1   | Control of Worker Exposure  |  |
| Product Characteristics   |   |  |
| Physical form of product  | Liquid, vapour pressure 0.5 - 10 kPa at STP   |  |
| Concentration of the Substance in Mixture/Article                     | Covers use of substance/product up to 100% (unless stated differently).,  |  |
| Frequency and Duration of   | Use   |  |
|   | 8 hours (unless stated differently).  |  |
| Other Operational Condition   |   |  |
|   | in 20°C above ambient temperature (unless stated differently).  |  |
| Assumes a good basic standard of occupational hygiene is implemented. |   |  |
| Contributing Scenarios  | Risk Management Measures  |  |
| General measures (carcinogens).                                       | Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenarios; clear up spills immediately and maintain all control measures. Consider the need for risk based health surveillance. |  |
| General measures (skin irritants).                                    | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if  |  |

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|   | hand contact with substance likely. Clea                     |                       |
|---|--|-----------------------|
|   | tion/spills as soon as they occur. Wash                      |                       |
|   | nation immediately. Provide basic emplo                      |                       |
|   | vent / minimise exposures and to report                      | any skin problems     |
|   | that may develop.  |                       |
| General exposures (closed   | No other specific measures identified.                       |                       |
| systems)  |  |                       |
| General exposures (closed   | Handle substance within a closed syster                      |                       |
| systems) with sample col-   | Sample via a closed loop or other syster                     | n to avoid exposure   |
| lectionGeneral measures   |  |                       |
| (skin irritants).   |  |                       |
| General exposures (closed   | Handle substance within a closed system                      |                       |
| systems)Use in contained  | Sample via a closed loop or other syster                     | n to avoid exposure   |
| batch processes Process sampling  | Sample via a closed loop or other syster                     | n to avoid exposure   |
| 1 100000 sampling   | Cample via a closed loop of other system                     |                       |
| Laboratory activities   | Handle within a fume cupboard or imple                       | ment suitable equiva- |
|   | lent methods to minimise exposure.                           |                       |
| Bulk transfers(closed sys- Ensure material transfers are under containment    |  | ainment or extract    |
| tems)   | ventilation.   |                       |
|   |  |                       |
| Equipment cleaning and  | Drain down and flush system prior to equipment opening or    |                       |
| maintenance   | maintenance.   |                       |
|   | Clear spills immediately.                                    |                       |
|   | Retain drain downs in sealed storage pending disposal or for |                       |
|   | subsequent recycle.  |                       |
| Storage.General measures  | Store substance within a closed system.                      |                       |
| (skin irritants).   | Sample via a closed loop or other syster                     | n to avoid exposure   |
| Continu 0.0   | Control of Environmental European                            |                       |
| Section 2.2   | Control of Environmental Exposure                            | T                     |
| Substance is complex UVCB   | ).   |                       |
| Predominantly hydrophobic.  Not readily biodegradable.                        |  |                       |
| Amounts Used  |  |                       |
|   | Lin rogion:  | 0.1                   |
| Fraction of EU tonnage used in region:  Regional use tonnage (tonnes/year):   |  | 0,1<br>5,0E+05        |
| Fraction of Regional tonnage  |  | 2,0E-03               |
|   |  | 1,0E+03               |
| Annual site tonnage (tonnes/year):  |  | 1,0E+04               |
| Maximum daily site tonnage (kg/day): 1,0E+04  Frequency and Duration of Use   |  | 1,0L10T               |
| Continuous release.   |  |                       |
| Emission Days (days/year):  |  | 100                   |
|   | influenced by risk management                                | •                     |
| Local freshwater dilution fact  |  | 10                    |
| Local marine water dilution factor: 100                                       |  |                       |
| Other Operational Condition   | ons affecting Environmental Exposure                         |                       |
|   | process (initial release prior to RMM):                      | 1,0E-03               |
| Release fraction to wastewater from process (initial release prior to 1,0E-05 |  | 1 4 OF OF             |

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|   | 1,0E-05                               |
|---|---------------------------------------|
| Release fraction to soil from process (initial release prior to RMM):   | , , , , , , , , , , , , , , , , , , , |
| Technical conditions and measures at process level (source) to pr   | event release                         |
| Common practices vary across sites thus conservative process re-<br>lease estimates used.   |                                       |
| Technical onsite conditions and measures to reduce or limit disch   | organ air amia                        |
| sions and releases to soil  | arges, air emis-                      |
| Risk from environmental exposure is driven by humans via indirect   |                                       |
| exposure (primarily ingestion).   |                                       |
| If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.  |                                       |
| Prevent discharge of undissolved substance to or recover from onsite  |                                       |
| wastewater.   |                                       |
| Treat air emission to provide a typical removal efficiency of (%)   | 90                                    |
| Treat onsite wastewater (prior to receiving water discharge) to provide   | 0                                     |
| the required removal efficiency of >= (%)   |                                       |
| Organisational measures to prevent/limit release from site  |                                       |
| Do not apply industrial sludge to natural soils.  |                                       |
| Sludge should be incinerated, contained or reclaimed.   |                                       |
| Conditions and Measures related to municipal sewage treatment p   | lant                                  |
| Estimated substance removal from wastewater via domestic sewage   | 95,0                                  |
| Estimated substance removal from wastewater via domestic sewage   |                                       |
| treatment (%)   |                                       |
| treatment (%) Total efficiency of removal from wastewater after onsite and offsite  | 95,0                                  |
| treatment (%) Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)  | ,                                     |
| treatment (%) Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%) Maximum allowable site tonnage (MSafe) based on release following  | 95,0<br>1,7E+05                       |
| treatment (%)  Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)  Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d)  | 1,7E+05                               |
| treatment (%)  Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)  Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d)  Assumed domestic sewage treatment plant flow (m3/d)   | 1,7E+05                               |
| treatment (%) Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%) Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d) Assumed domestic sewage treatment plant flow (m3/d) Conditions and Measures related to external treatment of waste fo  | 1,7E+05<br>2.000<br>r disposal        |
| treatment (%)  Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)  Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d)  Assumed domestic sewage treatment plant flow (m3/d)  Conditions and Measures related to external treatment of waste fo External treatment and disposal of waste should comply with applicable | 1,7E+05<br>2.000<br>r disposal        |
| treatment (%) Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%) Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d) Assumed domestic sewage treatment plant flow (m3/d) Conditions and Measures related to external treatment of waste fo  | 1,7E+05<br>2.000<br>r disposal        |
| treatment (%)  Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)  Maximum allowable site tonnage (MSafe) based on release following total wastewater treatment removal (kg/d)  Assumed domestic sewage treatment plant flow (m3/d)  Conditions and Measures related to external treatment of waste fo External treatment and disposal of waste should comply with applicable | 1,7E+05<br>2.000<br>r disposal        |

| SECTION 3   | EXPOSURE ESTIMATION |
|---|---------------------|
| Section 3.1 - Health  |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |                     |

| Section 3.2 -Environment  |
|---|
| The Hydrocarbon Block Method has been used to calculate environmental exposure with |
| the Petrorisk model.  |

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           | EXPOSURE SCENARIO                     |

According to EC No 1907/2006 as amended as at the date of this SDS

## **C7+ Gasoline Component**

Version Revision Date: SDS Number: Date of last issue: 06.03.2023

3.2 05.03.2024 800001008895 Print Date 12.03.2024

### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

Risk Management Measures are based on qualitative risk characterisation.

#### **Section 4.2 - Environment**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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# **C7+ Gasoline Component**

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**Exposure Scenario - Worker** 

| 30000000141      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Formulation & (re)packing of substances and mixtures- Industrial  |
| Use Descriptor   | Sector of Use: SU3, SU10 Process Categories: PROC 1, PROC 2, PROC 3, PROC 8a, PROC 8b, PROC 9, PROC 15 Environmental Release Categories: ERC2   |
| Scope of process | Formulation of the substance and its mixtures in batch or continuous operations within closed or contained systems, including incidental exposures during storage, materials transfers, mixing, maintenance, sampling and associated laboratory activities. |

| SECTION 2   | OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES   |  |
|---|---|--|
| Section 2.1                                       | Control of Worker Exposure  |  |
| Product Characteristics                           |   |  |
| Physical form of product                          | Liquid, vapour pressure 0.5 - 10 kPa at STP   |  |
| Concentration of the Substance in Mixture/Article | Covers use of substance/product up to 100% (unless stated differently).,  |  |
| Frequency and Duration of                         | Use   |  |
|   | 8 hours (unless stated differently).  |  |
| Other Operational Conditio                        |   |  |
|   | in 20°C above ambient temperature (unless stated differently).  |  |
|   | ard of occupational hygiene is implemented.   |  |
| Contributing Scenarios                            | Risk Management Measures  |  |
| General measures (carcinogens).                   | Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenarios; clear up spills immediately and maintain all control measures. Consider the need for risk based health surveillance. |  |
| General measures (skin irritants).                | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if  |  |

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# **C7+ Gasoline Component**

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|  | 1  |                       |
|--|--|-----------------------|
|  | hand contact with substance likely. Clear                                |                       |
|  | tion/spills as soon as they occur. Wash o                                |                       |
|  | nation immediately. Provide basic employ                                 |                       |
|  | vent / minimise exposures and to report a                                | any skin problems     |
|  | that may develop.  |                       |
| General exposures (closed                          | Handle substance within a closed system                                  | ١.                    |
| systems)   |  |                       |
|  | General exposures (closed Handle substance within a closed system.       |                       |
| systems)with sample col-                           | Sample via a closed loop or other system                                 | to avoid exposure     |
| lectionGeneral measures                            |  |                       |
| (skin irritants).                                  | Handle substance within a closed system                                  | `                     |
| General exposures (closed systems)Use in contained | Sample via a closed loop or other system                                 |                       |
| batch processes                                    | Sample via a closed loop of other system                                 | i to avoid exposure   |
| Process sampling                                   | Sample via a closed loop or other system                                 | to avoid exposure     |
| Loborotony optivities                              | Lloudle within a fume auch and as invalor                                | ant quitable service  |
| Laboratory activities                              | Handle within a fume cupboard or implement methods to minimise exposure. | nem sunable equiva-   |
|  | lent methods to minimise exposure.                                       |                       |
| Bulk transfers                                     | Ensure material transfers are under conta                                | ainment or extract    |
|  | ventilation.   |                       |
|  |  |                       |
| Drum/batch transfers                               | Ensure material transfers are under conta                                | ainment or extract    |
|  | ventilation.   |                       |
|  |  | •                     |
| Drum and small package                             | Minimise exposure by partial enclosure of                                |                       |
| filling  | equipment and provide extract ventilation                                | at openings.          |
| Equipment cleaning and                             | Drain down and flush system prior to equ                                 | ipment opening or     |
| maintenance  | maintenance.   | pg o.                 |
|  | Clear spills immediately.  |                       |
|  | Retain drain downs in sealed storage per                                 | nding disposal or for |
|  | subsequent recycle.  |                       |
|  |  |                       |
| Storage.General measures                           | Store substance within a closed system.                                  |                       |
| (skin irritants).                                  | Ensure operation is undertaken outdoors                                  |                       |
| Section 2.2  | Control of Environmental Exposure  |                       |
| Substance is complex UVCB                          | •  |                       |
| Predominantly hydrophobic.                         |  |                       |
| Not readily biodegradable.                         |  |                       |
| Amounts Used                                       |  |                       |
| Fraction of EU tonnage used                        | in region:   | 0,1                   |
| Regional use tonnage (tonne                        |  | 3,5E+05               |
| Fraction of Regional tonnage                       |  | 8,6E-02               |
| Annual site tonnage (tonnes/                       |  | 3,0E+04               |
|  |  | 3,0E+04               |
| Frequency and Duration of Use                      |  |                       |
| Continuous release.                                |  | 000                   |
| Emission Days (days/year):                         |  | 300                   |

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# **C7+ Gasoline Component**

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| Environmental factors not influenced by risk management  | _                    |
|--|----------------------|
| Local freshwater dilution factor:  | 10                   |
| Local marine water dilution factor:  | 100                  |
| Other Operational Conditions affecting Environmental Exposure  |                      |
| Release fraction to air from process (after typical onsite RMMs con-                                     | 1,0E-06              |
| sistent with EU Solvent Emissions Directive requirements):   |                      |
| Release fraction to wastewater from process (initial release prior to                                    | 1,0E-05              |
| RMM):  |                      |
| Release fraction to soil from process (initial release prior to RMM):                                    | 1,0E-04              |
| Technical conditions and measures at process level (source) to pr  | event release        |
| Common practices vary across sites thus conservative process re-   |                      |
| lease estimates used.  |                      |
| Technical onsite conditions and measures to reduce or limit disch  | arges, air emis-     |
| sions and releases to soil   |                      |
| Risk from environmental exposure is driven by humans via indirect  |                      |
| exposure (primarily ingestion).  |                      |
| If discharging to domestic sewage treatment plant, no secondary  |                      |
| wastewater treatment required.   |                      |
| Prevent discharge of undissolved substance to or recover from onsite                                     |                      |
| wastewater.  |                      |
| Treat air emission to provide a typical removal efficiency of (%)  | 0                    |
| Treat onsite wastewater (prior to receiving water discharge) to provide                                  | 85,3                 |
| the required removal efficiency of >= (%)  |                      |
| Organisational measures to prevent/limit release from site   |                      |
| Do not apply industrial sludge to natural soils.   |                      |
| Sludge should be incinerated, contained or reclaimed.  |                      |
| Conditions and Measures related to municipal sewage treatment p  | Nant                 |
| Estimated substance removal from wastewater via domestic sewage  | 95,0                 |
| treatment (%)  | 95,0                 |
| Total efficiency of removal from wastewater after onsite and offsite                                     | 95,0                 |
| (domestic treatment plant) RMMs (%)  |                      |
| Maximum allowable site tonnage (MSafe) based on release following  | 2,4E+05              |
| total wastewater treatment removal (kg/d)  |                      |
| Assumed domestic sewage treatment plant flow (m3/d)  | 2.000                |
| Conditions and Measures related to external treatment of waste fo  |                      |
| External treatment and disposal of waste should comply with applicable local and/or regions regulations. |                      |
|  |                      |
| Conditions and measures related to external recovery of waste  |                      |
|  | local and/or regiona |

| SECTION 3   | EXPOSURE ESTIMATION |
|---|---------------------|
| Section 3.1 - Health  |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |                     |

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## **C7+ Gasoline Component**

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### Section 3.2 - Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           | EXPOSURE SCENARIO                     |

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

Risk Management Measures are based on qualitative risk characterisation.

#### **Section 4.2 - Environment**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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# **C7+ Gasoline Component**

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**Exposure Scenario - Worker** 

SECTION 2

| 30000000360      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Use as a fuel- Industrial   |
| Use Descriptor   | Sector of Use: SU3, SU10 Process Categories: PROC 1, PROC 2, PROC 3, PROC 8a, PROC 8b, PROC 16 Environmental Release Categories: ERC7   |
| Scope of process | Covers the use as a fuel (or fuel additives and additive components) within closed or contained systems, including incidental exposures during activities associated with its transfer, use, equipment maintenance and handling of waste. |

OPERATIONAL CONDITIONS AND RISK MANAGEMENT

|   | MEASURES   |  |
|---|--|--|
| Section 2.1                                       | Control of Worker Exposure   |  |
| Product Characteristics                           |  |  |
| Physical form of product                          | Liquid, vapour pressure 0.5 - 10 kPa at STP  |  |
| Concentration of the Substance in Mixture/Article | Covers use of substance/product up to 100% (unless stated differently).,   |  |
| Frequency and Duration of                         | Use  |  |
| Covers daily exposures up to                      | 8 hours (unless stated differently).   |  |
| Other Operational Conditio                        |  |  |
|   | an 20°C above ambient temperature (unless stated differently).  ard of occupational hygiene is implemented.  |  |
| Contributing Scenarios                            | Risk Management Measures   |  |
| General measures (carcinogens).                   |  |  |
| General measures (skin irritants).                | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contami- |  |

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# **C7+ Gasoline Component**

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|  | nation immediately. Provide basic emplo vent / minimise exposures and to report a that may develop.   |                          |
|--|---|--------------------------|
| Bulk transfers   | Ensure material transfers are under cont ventilation.   | ainment or extract       |
| Drum/batch transfers   | Use drum pumps. Provide a good standard of general or co to 15 air changes per hour).   | ontrolled ventilation (5 |
| General exposures (closed systems)                                   | No other specific measures identified.  |                          |
| General exposures (closed systems)General measures (skin irritants). | Handle substance within a predominantly vided with extract ventilation. Provide a good standard of general ventil 3 to 5 air changes per hour).                           |                          |
| Use as a fuel(closed systems)  | Handle substance within a closed system   | ٦.                       |
| Equipment cleaning and maintenance                                   | Drain down system prior to equipment opening or maintenance.  Retain drain downs in sealed storage pending disposal or for subsequent recycle.  Clear spills immediately. |                          |
| Storage.   | Store substance within a closed system.   |                          |
| Storage.General measures (skin irritants).                           | Store substance within a closed system. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).                                       |                          |
| Section 2.2  | Control of Environmental Exposure   |                          |
| Substance is complex UVCB  |   |                          |
| Predominantly hydrophobic.   |   |                          |
| Not readily biodegradable.   |   |                          |
| Amounts Used   |   | •                        |
| Fraction of EU tonnage used  | in region:  | 0,1                      |
| Regional use tonnage (tonne  | es/year):   | 2,5E+05                  |
| Fraction of Regional tonnage used locally:                           |   | 0,1                      |
| Annual site tonnage (tonnes/   | year):  | 2,5E+04                  |
| Maximum daily site tonnage (kg/day): 8,3E+04                         |   | 8,3E+04                  |
| Frequency and Duration of Use  |   |                          |
| Continuous release.  |   |                          |
| Emission Days (days/year): 300                                       |   | 300                      |
|  | influenced by risk management   | T                        |
| Local freshwater dilution factor: 10                                 |   |                          |
|  |   | 100                      |
|  | ns affecting Environmental Exposure   | T = 2 = 2.               |
|  | process (initial release prior to RMM):   | 5,0E-04                  |
| Release fraction to wastewat   | er from process (initial release prior to   | 1,0E-05                  |

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| RMM):  |                  |  |
|--|------------------|--|
| Release fraction to soil from process (initial release prior to RMM):          | 0                |  |
| Technical conditions and measures at process level (source) to prevent release |                  |  |
| Common practices vary across sites thus conservative process re-               |                  |  |
| lease estimates used.  |                  |  |
| Technical onsite conditions and measures to reduce or limit disch              | arges, air emis- |  |
| sions and releases to soil   |                  |  |
| Risk from environmental exposure is driven by humans via indirect              |                  |  |
| exposure (primarily inhalation).   |                  |  |
| If discharging to domestic sewage treatment plant, no secondary                |                  |  |
| wastewater treatment required.   |                  |  |
| Prevent discharge of undissolved substance to or recover from onsite           |                  |  |
| wastewater.  |                  |  |
| Treat air emission to provide a typical removal efficiency of (%)              | 95,0             |  |
| Treat onsite wastewater (prior to receiving water discharge) to provide        | 0                |  |
| the required removal efficiency of >= (%)                                      |                  |  |
| If discharging to domestic sewage treatment plant, no secondary                | 0                |  |
| wastewater treatment required.   |                  |  |
| Organisational measures to prevent/limit release from site                     |                  |  |
| Do not apply industrial sludge to natural soils.                               |                  |  |
| Sludge should be incinerated, contained or reclaimed.                          |                  |  |
| Conditions and Measures related to municipal sewage treatment p                | lant             |  |
| Estimated substance removal from wastewater via domestic sewage                | 95,0             |  |
| treatment (%)  |                  |  |
| Total efficiency of removal from wastewater after onsite and offsite           | 95,0             |  |
| (domestic treatment plant) RMMs (%)  |                  |  |
| Maximum allowable site tonnage (MSafe) based on release following              | 1,3E+05          |  |
| total wastewater treatment removal (kg/d)                                      |                  |  |
| Assumed domestic sewage treatment plant flow (m3/d)                            | 2.000            |  |
| Conditions and Measures related to external treatment of waste for             |                  |  |
| This substance is consumed during use and no waste of substance is g           | enerated.        |  |
| Conditions and measures related to external recovery of waste                  |                  |  |
| This substance is consumed during use and no waste of substance is generated.  |                  |  |
|  |                  |  |

| SECTION 3   | EXPOSURE ESTIMATION |
|---|---------------------|
| Section 3.1 - Health  |                     |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |                     |

| Section 3.2 -Environment  |    |   |
|---|----|---|
| The Hydrocarbon Block Method has been used to calculate environmental exposure with | ne | ٦ |
| the Petrorisk model.  | е  | t |

| SECTION 4 | GUIDANCE TO CHECK COMPLIANCE WITH THE |
|-----------|---------------------------------------|
|           | EXPOSURE SCENARIO                     |

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## **C7+ Gasoline Component**

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### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

Risk Management Measures are based on qualitative risk characterisation.

#### **Section 4.2 - Environment**

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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**Exposure Scenario - Worker** 

SECTION 2

| 30000000361      |   |
|------------------|---|
| SECTION 1        | EXPOSURE SCENARIO TITLE   |
| Title            | Use as a fuel- Professional   |
| Use Descriptor   | Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 8a, PROC 8b, PROC 16 Environmental Release Categories: ERC9a, ERC9b  |
| Scope of process | Covers the use as a fuel (or fuel additives and additive components) within closed or contained systems, including incidental exposures during activities associated with its transfer, use, equipment maintenance and handling of waste. |

OPERATIONAL CONDITIONS AND RISK MANAGEMENT

|  | MEASURES  |  |
|--|---|--|
| Section 2.1  | Control of Worker Exposure  |  |
| Product Characteristics  |   |  |
| Physical form of product   | Liquid, vapour pressure 0.5 - 10 kPa at STP   |  |
| Concentration of the Substance in Mixture/Article  | Covers use of substance/product up to 100% (unless stated differently).,  |  |
| Frequency and Duration of Use  |   |  |
|  | 8 hours (unless stated differently).  |  |
| Other Operational Conditions affecting Exposure  |   |  |
| Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented. |   |  |
| Contributing Scenarios   | Risk Management Measures  |  |
| General measures (carcinogens).  | Consider technical advances and process upgrades (including automation) for the elimination of releases. Minimise exposure using measures such as closed systems, dedicated facilities and suitable general/local exhaust ventilation. Drain down systems and clear transfer lines prior to breaking containment. Clean/flush equipment, where possible, prior to maintenance. Where there is potential for exposure: restrict access to authorised persons; provide specific activity training to operators to minimise exposures; wear suitable gloves and coveralls to prevent skin contamination; wear respiratory protection when its use is identified for certain contributing scenarios; clear up spills immediately and maintain all control measures. Consider the need for risk based health surveillance. |  |
| General measures (skin irritants).   | Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contami-  |  |

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|  | nation immediately. Provide basic emplo vent / minimise exposures and to report a that may develop.  |                    |
|--|--|--------------------|
| Bulk transfers   | Ensure material transfers are under cont ventilation.  | ainment or extract |
| Drum/batch transfers   | Use drum pumps. Provide a good standard of general or controlled ventilation (5 to 15 air changes per hour).   |                    |
| General exposures (closed systems)                                   | No other specific measures identified.   |                    |
| General exposures (closed systems)General measures (skin irritants). | Handle substance within a predominantly vided with extract ventilation. Provide a good standard of general or co to 15 air changes per hour).  |                    |
| Use as a fuel(closed systems)  | Handle substance within a closed systen  | n.                 |
| Equipment cleaning and maintenance                                   | Drain down and flush system prior to equipment opening or maintenance.  Provide a good standard of general or controlled ventilation (5 to 15 air changes per hour).  Clear spills immediately.  Wear a respirator conforming to EN140 with Type A filter or better.  Retain drain downs in sealed storage pending disposal or for subsequent recycle. |                    |
| Storage.   | Store substance within a closed system.  |                    |
| Section 2.2  | Control of Environmental Exposure  |                    |
| Substance is complex UVCB  |  |                    |
| Predominantly hydrophobic.   |  |                    |
| Not readily biodegradable.   |  |                    |
| Amounts Used   |  |                    |
| Fraction of EU tonnage used  | l in region:   | 0,1                |
| Regional use tonnage (tonne  | es/year):  | 1,0E+05            |
| Fraction of Regional tonnage used locally:                           |  | 5,0E-04            |
| Annual site tonnage (tonnes/   | /year):  | 5,0E+01            |
| Maximum daily site tonnage (kg/day):                                 |  | 1,4E+02            |
| Frequency and Duration of  | Use  |                    |
| Continuous release.  |  |                    |
| Emission Days (days/year):   |  | 365                |
|  | influenced by risk management  |                    |
| Local freshwater dilution factor:                                    |  | 10                 |
| Local marine water dilution factor: 100                              |  |                    |
|  | ons affecting Environmental Exposure   |                    |
|  |  | 1,0E-02            |
| Release fraction to wastewa  | ter from process (initial release prior to   | 1,0E-05            |

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| This substance is consumed during use and no waste of substance is generated. |  |  |
| )   |  |  |

| SECTION 3   | EXPOSURE ESTIMATION |  |
|---|---------------------|--|
| Section 3.1 - Health  |                     |  |
| The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated. |                     |  |

## Section 3.2 - Environment

The Hydrocarbon Block Method has been used to calculate environmental exposure with the Petrorisk model.

| SECTION 4   | GUIDANCE TO CHECK COMPLIANCE WITH THE |  |
|---|---------------------------------------|--|
|   | EXPOSURE SCENARIO                     |  |
| Section 4.1 - Health  |                                       |  |
| Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management |                                       |  |
| Measures/Operational Conditions outlined in Section 2 are implemented.              |                                       |  |
| Where other Risk Management Measures/Operational Conditions are adopted, then users |                                       |  |
| should ensure that risks are managed to at least equivalent levels.                 |                                       |  |

According to EC No 1907/2006 as amended as at the date of this SDS

## **C7+ Gasoline Component**

Version Revision Date: SDS Number: Date of last issue: 06.03.2023

3.2 05.03.2024 800001008895 Print Date 12.03.2024

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects. Risk Management Measures are based on qualitative risk characterisation.

#### Section 4.2 - Environment

Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.