SAFETY DATA SHEET



Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

Total Energies DYNATRANS AC 10W_discontinued

SDS no. 36377

:

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

1.1 Product identifier

Product name : DYNATRANS AC 10W_discontinued

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

Identified uses

Formulation additives, lubricants and greases - Industrial

General use of lubricants and greases in vehicles or machinery - Industrial General use of lubricants and greases in vehicles or machinery - Professional

Transmission fluids

1.3 Details of the supplier of the safety data sheet

TotalEnergies Lubrifiants 562 Avenue du Parc de L'ile 92029 Nanterre Cedex FRANCE Tél: +33 (0)1 41 35 40 00

Fax: +33 (0)1 41 35 84 71

rm.msds-lubs@totalenergies.com

TOTAL UK LIMITED

183 Eversholt St, Kings Cross

London, NW1 1BU UNITED KINGDOM Tel: +44 (0)20 7339 8000 Fax: +44 (0)20 7339 8033

rm.gb-msds@totalenergies.com

Contact

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : National Poisons Information Service (NPIS): 111

Supplier

Telephone number: Emergency telephone: +44 1235 239670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Eye Irrit. 2, H319

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

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See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms

Signal word

Hazard statements : H319 - Causes serious eye irritation.

Precautionary statements

General : P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

Prevention : P280 - Wear eve/face protection.

P264 - Wash thoroughly after handling.

: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Response

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

Storage : Not applicable. **Disposal** : Not applicable.

Supplemental label

elements

articles

: Contains dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

: Not applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do

: None known.

not result in classification

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Distillates (petroleum), hydrotreated heavy paraffinic dihydro-3-(tetrapropenyl)furan- 2,5-dione	EC: 265-157-1 CAS: 64742-54-7 REACH #: 01-2119979080-37 EC: 247-781-6 CAS: 26544-38-7	≥10 - <25 <0.2	Aquatic Chronic 4, H413 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Chronic 4, H413	[1]
			See Section 16 for the full text of the H statements declared above.	

Additional information : Mineral oil of petroleum origin Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

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

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen

tight clothing such as a collar, tie, belt or waistband.

Skin contact: Wash skin thoroughly with soap and water or use recognised skin cleanser.

Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Wash out mouth with water. Remove dentures if any. If material has been

swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such

as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation dryness cracking

Ingestion: No specific data.

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4.3 Indication of any immediate medical attention and special treatment needed

: Treat symptomatically. Contact poison treatment specialist immediately if large Notes to physician

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion

products

: No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other

sections

: See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end use(s)

: Not available. Recommendations **Industrial sector specific** : Not available.

solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Reportable hazardous constituent(s) contained in UVCB- and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

No exposure limit value known.

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment

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of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Advisory OEL

: Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m3, NIOSH (REL) TWA 5 mg/m3, STEL 10 mg/m3, ACGIH (TLV) TWA 5 mg/m3 (highly refined)

DNELs/DMELs

Product/substance	Туре	Exposure	Value	Population	Effects
Distillates (petroleum), hydrotreated heavy paraffinic	DNEL	Long term Inhalation	2.73 mg/m ³	Workers	Systemic
, ,	DNEL	Long term Inhalation	5.58 mg/m ³	Workers	Local
	DNEL	Long term Dermal	970 µg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.19 mg/m³	General population	Local
	DNEL	Long term Oral	740 µg/kg bw/day	General population	Systemic
dihydro-3-(tetrapropenyl)furan- 2,5-dione	DNEL	Long term Dermal	0.33 mg/ kg bw/day	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Name	Method Detail
Distillates (petroleum), hydrotreated heavy paraffinic	Secondary Poisoning	9.33 mg/kg	-
dihydro-3-(tetrapropenyl)furan-2,5-dione		0.02 mg/l 0.002 mg/l 1.7 mg/kg dwt 0.17 mg/kg dwt 0.2 mg/kg dwt 10 mg/l	- - - -

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

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Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Hydrocarbon-proof gloves

nitrile rubber Fluorinated rubber

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical

characteristics, its resistance to the chemicals to be handled, the appropriateness

of its use and its replacement frequency

Body protection : Personal protective equipment for the body should be selected based on the task

being performed and the risks involved and should be approved by a specialist

before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator with combination filter for vapour/particulate Type A/P1 Warning! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing.

their choices and uses None under normal use conditions

Environmental exposure

controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process

equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Clear]
Colour : Yellow.toAmber.
Odour : Characteristic.
Odour threshold : Not available.
PH : Not available.
Melting point/freezing point : Not available.
Initial boiling point and : Not available.

boiling range

Flash point : Open cup: >220°C [Cleveland Open Cup (COC)]

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: Not available. **Evaporation rate** Flammability (solid, gas) : Not available. : Not available. Upper/lower flammability or

explosive limits

Vapour pressure : Not available. Vapour density : Not available. : 0.882 to 0.886 Relative density

Solubility(ies) : Insoluble in the following materials: cold water and hot water.

Miscible with water

Partition coefficient: n-octanol/ : Not applicable.

water

Auto-ignition temperature : Not available. **Decomposition temperature** : Not available.

: Kinematic (40°C): 37 mm²/s **Viscosity**

Explosive properties : Not available. : Not applicable Oxidising properties

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

: Insoluble Solubility in water

SECTION 10: Stability and reactivity

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

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : Strong oxidising agents

10.6 Hazardous : Under normal conditions of storage and use, hazardous decomposition products

decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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Product/substance	Result	Species	Dose	Exposure	Test
Distillates (petroleum), hydrotreated heavy paraffinic	LC50 Inhalation Dusts and mists	Rat	5.53 mg/l	4 hours	OECD 403 Acute Inhalation Toxicity
	LD50 Dermal	Rabbit	>5000 mg/kg	-	OECD 402 Acute Dermal Toxicity
	LD50 Oral	Rat	>5000 mg/kg	-	OECD 401 Acute Oral Toxicity
dihydro-3-(tetrapropenyl) furan-2,5-dione	LC50 Inhalation Dusts and mists	Rat	5.3 mg/l	4 hours	-
	LD50 Dermal LD50 Dermal LD50 Oral	Rabbit Rabbit Rat	>5 g/kg >5000 mg/kg 2900 mg/kg	- - -	- - -

Conclusion/Summary

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

Acute toxicity estimates

Product/substance	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Distillates (petroleum), hydrotreated heavy paraffinic	N/A	N/A	N/A	N/A	5.53
dihydro-3-(tetrapropenyl)furan-2,5-dione	2900	N/A	N/A	N/A	5.3

Irritation/Corrosion

Conclusion/Summary

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

Eyes : Causes serious eye irritation.

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

Sensitisation

Conclusion/Summary :

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

Mutagenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/substance	Category	Route of exposure	Target organs
dihydro-3-(tetrapropenyl)furan-2,5-dione	Category 3	-	Respiratory tract irritation

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Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Defatting to the skin. May cause skin dryness and irritation.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

> pain or irritation watering

redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation dryness cracking

: No specific data. Ingestion

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

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

: Not available. Potential delayed effects

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards. Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Other information : Not available.

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SECTION 12: Ecological information

12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
Distillates (petroleum), hydrotreated heavy paraffinic		Daphnia - Daphnia magna	48 hours	OECD 202
	Acute EC50 110 to 160 mg/l	Algae	96 hours	-
luran-2,3-dione	Acute EC50 800 mg/l	Micro-organism	3 hours	-

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/substance	LogK _{ow}	BCF	Potential
dihydro-3-(tetrapropenyl) furan-2,5-dione	4.39	-	high

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

Mobility in soil

: Given its physical and chemical characteristics, the product generally shows low soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used The following Waste Codes are only

suggestions: 13 02 05*

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

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Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ICAO/IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

14.7 Transport in bulk according to IMO

instruments

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - : Not listed

Air

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Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

LU - Luxembourg prohibited chemicals in the workplace

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: All components are listed or exempted.

Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.

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Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

15.2 Chemical safety

assessment

: This product contains substances for which Chemical Safety Assessments are still

required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Value : ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Eye Irrit. 2, H319	Expert judgment

Full text of abbreviated H statements

H317	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.
H319	Causes serious eye irritation.
	May cause respiratory irritation. May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS]

Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE -
	Category 3

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Date of previous revision: No previous validation

Version : 1

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To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture : 36377 Code

Product name : DYNATRANS AC 10W discontinued

Section 1 - Title

Short title of the exposure

scenario

: Formulation additives, lubricants and greases - Industrial

: Identified use name: Formulation additives, lubricants and greases - Industrial List of use descriptors Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a,

> PROC08b, PROC09, PROC15 Sector of end use: SU03, SU10

Subsequent service life relevant for that use: No.

Environmental Release Category: ERC02

Environmental contributing scenarios

Health Contributing

scenarios

: General measures applicable to all activities

General exposures Use in contained systems Elevated temperature - PROC02 Mixing operations Closed systems Batch processes at elevated temperatures -

PROC03

Mixing operations Open systems Batch processes at elevated temperatures -

PROC04, PROC05

Mixing operations (open systems) - PROC04, PROC05

Process sampling - PROC04, PROC08b Bulk transfers Dedicated facility - PROC08b Drum/batch transfers Dedicated facility - PROC08b Drum/batch transfers Non-dedicated facility - PROC08a Equipment cleaning and maintenance - PROC08a, PROC08b

Drum and small package filling - PROC09

Laboratory activities - PROC15 Storage - PROC01, PROC02

Processes and activities covered by the exposure scenario

: Industrial formulation of lubricant additives, lubricants and greases, Includes material transfers, mixing, large and small scale packing, sampling, maintenance.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:

No exposure scenario required

Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

Concentration of substance in mixture or

article

: Covers percentage substance in the product up to 100 %. (unless stated differently)

: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure

Amounts used : Not applicable.

Frequency and duration of

use/exposure

Physical state

: Covers daily exposures up to 8 hours (unless stated differently)

Human factors not influenced by risk

management

: Not applicable.

Other conditions affecting

workers exposure

: Covers percentage substance in the product up to 100% (unless stated differently)

Date of issue/Date of revision : 3/10/2020 16/27 Conditions and measures related to personal protection, hygiene and health evaluation

Advice on general occupational hygiene

: Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN 374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. Avoid direct eye contact with product, also via contamination on hands.

Personal protection : Use suitable eye protection.

Contributing scenario controlling worker exposure for 3: General exposures Use in contained systems Elevated temperature

No other specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 4: Mixing operations Closed systems Batch processes at elevated temperatures

Ventilation control

: Provide extract ventilation to points where emissions occur.

measures

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 5: Mixing operations Open systems Batch processes at elevated temperatures

Frequency and duration of

: Avoid carrying out activities involving exposure for more than 4 hours per day.

use/exposure

Ventilation control: Provide extract ventilation to points where emissions occur.

measures

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 6: Mixing operations (open systems)

Ventilation control

: Provide extract ventilation to points where emissions occur.

measures

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 7: Process sampling

Frequency and duration of

use/exposure

: Avoid carrying out activities involving exposure for more than 1 hour per day.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

: Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.

Contributing scenario controlling worker exposure for 8: Bulk transfers Dedicated facility

Frequency and duration of : Avoid of

: Avoid carrying out activities involving exposure for more than 4 hours per day.

use/exposure

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection : Wear chemical-resistant gloves (tested to EN374) in combination with intensive

management supervision controls.

Contributing scenario controlling worker exposure for 9: Drum/batch transfers Dedicated facility

Ventilation control: Provide extract ventilation to points where emissions occur.

measures

Conditions and measures related to personal protection, hygiene and health evaluation

Formulation additives, lubricants and greases Industrial

Contributing scenario controlling worker exposure for 10: Drum/batch transfers Non-dedicated facility

Frequency and duration of

use/exposure

: Avoid carrying out activities involving exposure for more than 1 hour per day.

Ventilation control

measures

: Provide a good standard of general or controlled ventilation (10 to 15 air changes

per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

: Wear chemical-resistant gloves (tested to EN374) in combination with intensive

management supervision controls.

Contributing scenario controlling worker exposure for 11: Equipment cleaning and maintenance

Technical conditions and

measures to control dispersion from source towards the worker

: Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Engineering controls : Drain down and flush system prior to equipment break-in or maintenance.

Conditions and measures related to personal protection, hygiene and health evaluation

Advice on general occupational hygiene : Clear spills immediately.

Personal protection : Wear chemical-resistant gloves (tested to EN374) in combination with intensive

management supervision controls.

Contributing scenario controlling worker exposure for 12: Drum and small package filling

Ventilation control measures

: Provide a good standard of general or controlled ventilation (10 to 15 air changes

per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

: Wear chemical-resistant gloves (tested to EN374) in combination with specific

activity training.

Contributing scenario controlling worker exposure for 13: Laboratory activities

Frequency and duration of

: Avoid carrying out activities involving exposure for more than 4 hours per day.

use/exposure

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 14: Storage

: Store substance within a closed system. **Engineering controls**

Conditions and measures related to personal protection, hygiene and health evaluation

Section 3 - Exposure estimation and reference to its source

Website: : Not applicable.

Exposure estimation and reference to its source - Environment: 1:

Exposure assessment

(environment):

: Used ECETOC TRA model..

Exposure estimation and

: Not available.

reference to its source

Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

Exposure assessment

(human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment

that covers this product.

Exposure estimation and reference to its source

: Not available.

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Exposure estimation and reference to its source - Workers: 3: General exposures Use in contained systems Elevated temperature

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 4: Mixing operations Closed systems Batch processes at elevated temperatures

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 5: Mixing operations Open systems Batch processes at elevated temperatures

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 6: Mixing operations (open systems)

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 7: Process sampling

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 8: Bulk transfers Dedicated facility

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 9: Drum/batch transfers Dedicated facility

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 10: Drum/batch transfers Non-dedicated facility

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Formulation additives, lubricants and greases - Industrial

Exposure estimation and reference to its source - Workers: 11: Equipment cleaning and maintenance

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 12: Drum and small package filling

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 13: Laboratory activities

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 14: Storage

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

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. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.atiel.org/reach/introduction.
Health	: Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. For further information see www.atiel.org/reach/introduction.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

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Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture Code : 36377

Product name : DYNATRANS AC 10W_discontinued

Section 1 - Title

Short title of the exposure

scenario

: General use of lubricants and greases in vehicles or machinery - Industrial

List of use descriptors : Ident

: Identified use name: General use of lubricants and greases in vehicles or

machinery - Industrial

Process Category: PROC01, PROC02, PROC08b, PROC09

Sector of end use: SU03

Subsequent service life relevant for that use: No. Environmental Release Category: ERC04, ERC07

Environmental contributing scenarios

Health Contributing

scenarios

: General measures applicable to all activities General exposures (closed systems) - PROC01

Initial factory fill of equipment Use in contained systems - PROC02, PROC09

Initial factory fill of equipment Open systems - PROC08b

Operation of equipment containing engine oils and similar Use in contained

systems - PROC01

Equipment cleaning and maintenance - PROC08b

Equipment cleaning and maintenance Operation is carried out at elevated

temperature (> 20°C above ambient temperature) - PROC08b

Storage - PROC01, PROC02

Processes and activities covered by the exposure scenario

Covers general use of lubricants and greases in vehiculs or machinery in closed systems. Includes filling and draining of containers and operation of enclosed machinery (including engines) and associated maintenance and storage activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:

No exposure scenario required

Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

Concentration of substance in mixture or article

: Covers percentage substance in the product up to 100% (unless stated differently).

Physical state Frequency and duration of : Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure.

use/exposure

: Covers daily exposures up to 8 hours (unless stated differently).

Other conditions affecting workers exposure

: Assumes use at not more than 20°C above ambient temperature. unless stated differently.

Assumes a good basic standard of occupational hygiene has been implemented.

Conditions and measures related to personal protection, hygiene and health evaluation

Advice on general occupational hygiene

: Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN 374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. Avoid direct eye contact with product, also via contamination on hands.

Personal protection : Use suitable eye protection.

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General use of lubricants and greases in vehicles or machinery - Industrial

Contributing scenario controlling worker exposure for 3: General exposures (closed systems)

No other specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 4: Initial factory fill of equipment Use in contained systems

No other specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 5: Initial factory fill of equipment Open systems

Frequency and duration of : Avoid carrying out activities involving exposure for more than 4 hours per day.

use/exposure

Ventilation control

measures

: Provide a good standard of general or controlled ventilation (10 to 15 air changes

per hour)

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 6: Operation of equipment containing engine oils and similar Use in contained systems

No other specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 7: Equipment cleaning and maintenance

Technical conditions and measures at process level (source) to prevent release

: Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Engineering controls

: Drain down system prior to equipment break-in or maintenance.

Ventilation control measures

: Provide a good standard of general ventilation (not less than 3 to 5 air changes per

hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

: Wear chemical-resistant gloves (tested to EN374) in combination with specific activity training.

Contributing scenario controlling worker exposure for 8: Equipment cleaning and maintenance Operation is carried out at elevated temperature (> 20°C above ambient temperature)

Technical conditions and

measures to control dispersion from source towards the worker

: Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Engineering controls: Drain down system prior to equipment break-in or maintenance.

Ventilation control measures

: Provide extract ventilation to emission points when contact with warm (>50°C) lubricant is likely.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection : Wear chemical-resistant gloves (tested to EN374) in combination with intensive management supervision controls.

Contributing scenario controlling worker exposure for 9: Storage

Engineering controls: Store substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Section 3 - Exposure estimation and reference to its source

Website: : Not applicable.

Exposure estimation and reference to its source - Environment: 1:

Exposure assessment

(environment):

: Used ECETOC TRA model..

Exposure estimation and

reference to its source

: Not available.

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Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 3: General exposures (closed systems)

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 4: Initial factory fill of equipment Use in contained systems

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 5: Initial factory fill of equipment Open systems

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 6: Operation of equipment containing engine oils and similar Use in contained systems

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 7: Equipment cleaning and maintenance

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 8: Equipment cleaning and maintenance Operation is carried out at elevated temperature (> 20°C above ambient temperature)

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 9: Storage

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

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DYNATRANS AC 10W_discontinued		General use of lubricants and greases in vehicles or machinery - Industrial
Environment	all sites; thus, scalin management meas provided in SPERC RCRs > 1), addition	on assumed operating conditions which may not be applicable to a may be necessary to define appropriate site-specific risk ures. Further details on scaling and control technologies are factsheet. If scaling reveals a condition of unsafe use (i.e., al RMMs or a site-specific chemical safety assessment is information see www.atiel.org/reach/introduction.
Health	users should ensure	anagement measures/operational conditions are adopted, then that risks are managed to at least equivalent levels. For further watiel.org/reach/introduction.

Additional good practice advice beyond the REACH CSA

Environment : Not available.

Health : Not available.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition : Mixture Code : 36377

Product name : DYNATRANS AC 10W_discontinued

Section 1 - Title

Short title of the exposure

scenario

: General use of lubricants and greases in vehicles or machinery - Professional

List of use descriptors

: Identified use name: General use of lubricants and greases in vehicles or

machinery - Professional

Process Category: PROC01, PROC02, PROC08a, PROC08b, PROC20

Sector of end use: SU22

Subsequent service life relevant for that use: No. Environmental Release Category: ERC09a, ERC09b

Environmental contributing scenarios

Health Contributing

scenarios

: General measures applicable to all activities

Operation of equipment containing engine oils and similar Use in contained

systems - PROC01

Material transfers Non-dedicated facility - PROC08a

Equipment cleaning and maintenance Dedicated facility - PROC08b, PROC20

Storage - PROC01, PROC02

Processes and activities covered by the exposure scenario

Covers general use of lubricants and greases in vehiculs or machinery in closed systems. Includes filling and draining of containers and operation of enclosed machinery (including engines) and associated maintenance and storage activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1:

No exposure scenario required

Contributing scenario controlling worker exposure for 2: General measures applicable to all activities

Concentration of substance in mixture or

substance in mixture or article

Physical state

: Covers percentage substance in the product up to 100% (unless stated differently).

: Liquid, vapour pressure < 0.5 kPa at Standard Temperature and Pressure.

Frequency and duration of

use/exposure

: Covers daily exposures up to 8 hours (unless stated differently).

Other conditions affecting workers exposure

: Assumes use at not more than 20°C above ambient temperature. unless stated differently.

Assumes a good basic standard of occupational hygiene has been implemented.

Conditions and measures related to personal protection, hygiene and health evaluation

also via contamination on hands.

Advice on general occupational hygiene

: Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN 374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop. Avoid direct eye contact with product,

Personal protection : Use suitable eye protection.

General use of lubricants and greases in vehicles or machinery - Professional

Contributing scenario controlling worker exposure for 3: Operation of equipment containing engine oils and similar Use in contained systems

No other specific measures identified.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 4: Material transfers Non-dedicated facility

Frequency and duration of

: Avoid carrying out activities involving exposure for more than 4 hours per day.

use/exposure

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection : Wear chemical-resistant gloves (tested to EN374) in combination with specific

activity training.

Contributing scenario controlling worker exposure for 5: Equipment cleaning and maintenance Dedicated

facility

Technical conditions and measures at process level (source) to prevent release : Retain drain-downs in sealed storage pending disposal or for subsequent recycle.

Engineering controls : Drain down system prior to equipment break-in or maintenance.

Conditions and measures related to personal protection, hygiene and health evaluation

Contributing scenario controlling worker exposure for 6: Storage

Engineering controls : Store substance within a closed system.

Conditions and measures related to personal protection, hygiene and health evaluation

Section 3 - Exposure estimation and reference to its source

Website: : Not applicable.

Exposure estimation and reference to its source - Environment: 1:

Exposure assessment

: Used ECETOC TRA model..

(environment):

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 2: General measures applicable to all activities

Exposure assessment

(human):

The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment

that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 3: Operation of equipment containing engine oils and similar Use in contained systems

Exposure assessment

(human):

The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment

that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 4: Material transfers Non-dedicated facility

Exposure assessment

(human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

General use of lubricants and greases in vehicles or machinery - Professional

Exposure estimation and reference to its source - Workers: 5: Equipment cleaning and maintenance Dedicated facility

Exposure assessment

(human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Exposure estimation and reference to its source - Workers: 6: Storage

Exposure assessment (human):

: The risk Management Mesures/Operational Conditions that are identified in the Exposure Scenario are the outcome of a quantitative and qualitative assessment that covers this product.

Exposure estimation and reference to its source

: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

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. Further details on scaling and control technologies are provided in SPERC factsheet. If scaling reveals a condition of unsafe use (i.e., RCRs > 1), additional RMMs or a site-specific chemical safety assessment is required. For further information see www.atiel.org/reach/introduction.
Health	: Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels. For further information see www.atiel.org/reach/introduction.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

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