GREASE F-RAFC

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ISSUE DATE: 10.11.2021
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VERSION: 1.0

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

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Grease F-RAFC
Product code	:	Ford Internal Ref.: 505594
SDS Number	:	9298
UFI	:	KH75-NFE7-610T-A4U4
Product use	:	Professional use

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

1.2.1. Relevant identified uses

Function or use category	:	Lubricants, Greases and Release Products

1.2.2. Uses advised against

Restrictions on use	:	None known

1.3. Details of the supplier of the safety data sheet

Supplier
Ford-Werke GmbH
Edsel-Ford-Str. 2-14
50769 Cologne
Germany
+49 221 90-33333
sdseu@ford.com

Distributor
Ford Motor Company Ltd.
Parts Distribution Centre
Royal Oak Way South
NN11 8NT Daventry, Northants
United Kingdom
+44 1327 305 198

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Health hazards	Respiratory sensitisation, Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms

Signal word	Danger
Contains	Naphthenic acids, zinc salts, basic, Naphthenic acids, zinc salts

Hazard statements

H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements

Prevention

P261	Avoid breathing dust, fume, gas, mist, spray, vapours.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves, protective clothing, eye protection, face protection.
P284	In case of inadequate ventilation wear respiratory protection.

Response

P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Naphthenic acids, zinc salts, basic	84418-50-8 282-762-6 01-2119988500-34-XXXX	1 -< 5	Resp. Sens. 1, H334 Skin Sens. 1, H317 Aquatic Chronic 3, H412	UVCB
Naphthenic acids, zinc salts	12001-85-3 234-409-2 01-2120783834-41-XXXX	1,0 -< 2,5	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	UVCB
Hexanoic acid, 2-ethyl-, zinc salt, basic	85203-81-2 286-272-3 01-2119979093-30-XXXX	0,1 -< 1	Eye Irrit. 2, H319 Repr. 2, H361d Aquatic Chronic 3, H412	

Comments : UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediately remove contaminated clothing or footwear. Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If breathing stops, give artificial respiration. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with soap and water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Consult an ophtalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth out with water. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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

Treat symptomatically. Symptoms may be delayed.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Move containers from fire area if it can be done without personal risk.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Other information : Collect the propellant mechanically and put it into a barrel with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

For containment : Stop the flow of material, if this is without risk. Move containers from fire area if it can be done without personal risk.

Methods for cleaning up : Large Spills: Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Clean surface thoroughly to remove residual contamination. Small spills: Scrape up material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 :" Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, spray, vapours. Wear personal protective equipment.

Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

Incompatible materials : Strong acids. Strong alkalis. Strong oxidizing agents.

7.3. Specific end use(s)

Lubricants, Greases and Release Products.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Naphthenic acids, zinc salts, basic (84418-50-8)

PNEC (Water)	
PNEC aqua (freshwater)	0.64 µg/L
PNEC aqua (marine water)	6.39 µg/L
PNEC aqua (intermittent, freshwater)	63.86 µg/L
PNEC aqua (intermittent, marine water)	6.39 µg/L
PNEC (Sediment)	
PNEC sediment (freshwater)	31.93 mg/kg dwt
PNEC sediment (marine water)	3.19 mg/kg dwt
PNEC (Soil)	
PNEC soil	6.38 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	147.73 µg/L

Naphthenic acids, zinc salts (12001-85-3)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	3.3 mg/kg bw/day
Long-term - systemic effects, inhalation	1.18 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0.17 ng/kg bodyweight/day
Long-term - systemic effects, inhalation	0.29 mg/m³
Long-term - systemic effects, dermal	1.7 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.004 mg/l
PNEC aqua (marine water)	0 mg/l
PNEC aqua (intermittent, freshwater)	0.04 mg/l
PNEC aqua (intermittent, marine water)	0.04 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.015 mg/kg dwt
PNEC sediment (marine water)	0.002 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.001 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	689.7 µg/L

Hexanoic acid, 2-ethyl-, zinc salt, basic (85203-81-2)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	6.41 mg/kg bw/day
Long-term - systemic effects, inhalation	20.83 mg/m³

DNEL/DMEL (General population)

Long-term - systemic effects,oral	3.21 mg/m³
Long-term - systemic effects, dermal	3.21 mg/m³
Long-term - local effects, inhalation	10.42 mg/m³

PNEC (Water)

PNEC aqua (freshwater)	20.6 µg/L
PNEC aqua (marine water)	6.1 µg/L

PNEC (Sediment)

PNEC sediment (freshwater)	117.8 mg/kg dwt
PNEC sediment (marine water)	56.5 mg/kg dwt

PNEC (Soil)

PNEC soil	36.6

PNEC (STP)

PNEC sewage treatment plant	52 µg/L

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

8.2.2. Personal protection equipment

Personal protective equipment:
Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses. EN 166. Wear security glasses which protect from splashes

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves. EN 374. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	EN ISO 374 Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
In case of splash contact: Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	EN ISO 374 Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Paste.
Colour	:	light brown.
Odour	:	Characteristic.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	0.9 g/cm³ @ 25°C
Solubility	:	Insoluble in: water.
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

VOC (EU)	:	0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong alkalis. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Based on available data, the classification criteria are not met
Acute toxicity (dermal)	:	Based on available data, the classification criteria are not met
Acute toxicity (inhalation)	:	Based on available data, the classification criteria are not met
Skin corrosion/irritation	:	Based on available data, the classification criteria are not met
Serious eye damage/irritation	:	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	:	Based on available data, the classification criteria are not met
Carcinogenicity	:	Based on available data, the classification criteria are not met (All hydrocarbons in this mixture: Note L is applicable (DMSO <3%), therefore no classification as carcinogen)
Reproductive toxicity	:	Based on available data, the classification criteria are not met
STOT-single exposure	:	Based on available data, the classification criteria are not met
STOT-repeated exposure	:	Based on available data, the classification criteria are not met
Aspiration hazard	:	Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	:	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	:	Based on available data, the classification criteria are not met
Hazardous to the aquatic environment, long-term (chronic)	:	Based on available data, the classification criteria are not met

12.2. Persistence and degradability

Naphthenic acids, zinc salts, basic (84418-50-8)

Persistence and degradability	Inherently biodegradable.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Grease F-RAFC

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Other adverse effects

Other adverse effects	:	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	:	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations.
Waste treatment methods	:	Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations	:	Do not allow this material to drain into sewers/water supplies.
European List of Waste (LoW) code	:	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 12 01 12* - spent waxes and fats 15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID
Not regulated for transport

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3(b)	Grease F-RAFC ; Naphthenic acids, zinc salts, basic ; Hexanoic acid, 2-ethyl-, zinc salt, basic
3(c)	Naphthenic acids, zinc salts, basic ; Hexanoic acid, 2-ethyl-, zinc salt, basic

Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content	:	0 %
Other information, restriction and prohibition regulations	:	Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. Directive 94/33/EC on the protection of young people at work, as amended. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. For details, refer to section 3 and 8.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information	:	Not applicable

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:
None.

Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods

LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361d	Suspected of damaging the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Attachment to the Safety Data Sheet

Product Name: Grease F-RAFC

Ford Int. Ref. No.: 505594 REVISION DATE: 10.11.2021

Involved Products:

	Finiscode	Part number	Container Size:
. 1	2 602 260	MU7J 19G209 EA	50 g