Engine Flush

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 17/10/2022 Revision date: 17/06/2021 Version: 10.01

Part No: W51265CED - Engine Flush

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

1.1. Product identifier

Product name	:	Engine Flush
Product code	:	W51265
Type of product	:	Detergent
Product group	:	Trade product

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

1.2.1. Relevant identified uses

Use of the substance/mixture	:	Treatment for the cleaning of oil circuits.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ITW ADDITIVES INTL B.V.
Industriepark-West 46
9100 Sint-Niklaas
Belgium
T +32 3 766 60 20 - F +32 3 778 16 56
msds@wynns.eu - www.wynns.com

1.4. Emergency telephone number

Emergency number	:	BIG: +32(0)14 58 45 45 (NL FR EN DE)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aspiration hazard, Category 1	H304
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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 [CLP]

Hazard pictograms (CLP) :



GHS08

Signal word (CLP)	:	Danger
Contains	:	C8-C26 branched and linear hydrocarbons – Distillates, Hydrocarbons, C10, aromatics, <1% naphthalene
Hazard statements (CLP)	:	H304 - May be fatal if swallowed and enters airways. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P102 - Keep out of reach of children. P405 - Store locked up. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P331 - Do NOT induce vomiting. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
C8-C26 branched and linear hydrocarbons – Distillates	CAS-No.: 848301-67-7 EC-No.: 481-740-5 REACH-no: 01-0000020119-75	≥ 50	Asp. Tox. 1, H304 EUH066
Hydrocarbons, C10, aromatics, <1% naphthalene	EC-No.: 918-811-1 REACH-no: 01-2119463583-34	10 – 15	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl)	CAS-No.: 68603-38-3 EC-No.: 271-653-9 REACH-no: 01-2119951823-33	2,5 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
2,2'-iminodiethanol	CAS-No.: 111-42-2 EC-No.: 203-868-0 EC Index-No.: 603-071-00-1 REACH-no: 01-2119488930-28	< 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361fd STOT RE 2, H373

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 : Check the vital functions. Keep victim at rest in half upright position. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Keep watching the victim. Give psychological aid. Prevent cooling by covering the victim (no warming up). Keep the victim calm, avoid physical strain. If necessary seek medical advice.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell. Ingestion of large quantities: immediately to hospital.

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

Symptoms/effects after ingestion : Risk of aspiration pneumonia. May be fatal if swallowed and enters airways.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. AFFF foam. ABC-powder.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid. Agitation can cause build up of electrostatic charge.
Explosion hazard : Product is not explosive.

5.3. Advice for firefighters

Firefighting instructions : Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable gloves and eye/face protection. protective clothing.
Emergency procedures : Mark the danger area. Prevent flow to low areas. In confined space use self-contained breathing apparatus. Take off contaminated clothing.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain leaking substance, pump over in suitable containers.
Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Clean preferably with a detergent - Avoid the use of solvents.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Meet the legal requirements. Repeated exposure may cause skin dryness or cracking. Presents no particular risk when handled in accordance with good occupational hygiene practice.
Hygiene measures : Use good personal hygiene practices. IF ON SKIN: Gently wash with plenty of soap and water. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.
Storage conditions : Protect from sunlight. Store in a well-ventilated place. Meet the legal requirements.
Storage area : Meet the legal requirements. Ventilation along the floor.
Special rules on packaging : Store in a closed container. Labelling according to.

7.3. Specific end use(s)

Read label before use. Observe the label precautions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Hydrocarbons, C10, aromatics, <1% naphthalene	
Belgium - Occupational Exposure Limits	
OEL TWA	200 mg/m³

2,2'-iminodiethanol (111-42-2)	
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m³
OEL TWA [ppm]	0,46 ppm
Remark	D

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

C8-C26 branched and linear hydrocarbons – Distillates (848301-67-7)	
PNEC (Sediment)	
PNEC sediment (freshwater)	2,06 mg/kg dwt
PNEC (Soil)	
PNEC soil	1,68 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

Hydrocarbons, C10, aromatics, <1% naphthalene	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	12,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	151 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	7,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	32 mg/m³
Long-term - systemic effects, dermal	7,5 mg/kg bodyweight/day

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	4,16 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	73,44 mg/m³

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)	
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	6,25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	21,73 mg/m³
Long-term - systemic effects, dermal	2,5 mg/kg bodyweight/day
PNEC (STP)	
PNEC sewage treatment plant	0,83 mg/l

2,2'-iminodiethanol (111-42-2)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0,13 mg/kg bodyweight/day
Long-term - local effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0,06 mg/kg bodyweight/day
Long-term - systemic effects, dermal	0,07 mg/kg bodyweight/day
Long-term - local effects, inhalation	0,25 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0,0156 mg/l
PNEC aqua (marine water)	0,00156 mg/l
PNEC aqua (intermittent, freshwater)	0,097 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,0718 mg/kg dwt
PNEC sediment (marine water)	0,00718 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,00518 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	1,04 mg/kg food
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Does not require any specific or particular technical measures.

8.2.2. Personal protection equipment

Personal protective equipment:
Gloves. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

No additional information available

8.2.2.2. Skin protection

Hand protection:
Neoprene. Nitrile rubber. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Time of penetration is to be checked with the glove producer

8.2.2.3. Respiratory protection

No additional information available

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
Breakthrough time : >30'. Thickness of the glove material >0,1 mm.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Yellow.
Appearance	:	clear.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Explosive limits	:	Not available
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	72 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	4 mm²/s @40°C
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50 °C	:	Not available
Density	:	0,8 g/cm³ @20°C
Relative density	:	Not available
Relative vapour density at 20 °C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Other properties	:	Dimethylsulfoxide (DMSO) <3%

Additional information : The physical and chemical data in this section are typical values for this product and are not intended as product specifications.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from strong acids and strong oxidizers.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. On burning: release of harmful/irritant gases/vapours. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

C8-C26 branched and linear hydrocarbons – Distillates (848301-67-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Sprague-Dawley
LD50 dermal rat	> 2000 mg/kg bodyweight Sprague-Dawley

Hydrocarbons, C10, aromatics, <1% naphthalene	
LD50 oral rat	6318 mg/kg bodyweight Crl:CDBR
LD50 dermal rabbit	> 2000 mg/kg bodyweight New Zealand White
LC50 Inhalation - Rat	> 4,688 mg/l/4h Sprague-Dawley

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)	
LD50 oral rat	> 3000 mg/kg bodyweight

2,2'-iminodiethanol (111-42-2)	
LD50 oral rat	1600 mg/kg

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Hydrocarbons, C10, aromatics, <1% naphthalene	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

2,2'-iminodiethanol (111-42-2)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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

Engine Flush	
Viscosity, kinematic	4 mm²/s @40°C

C8-C26 branched and linear hydrocarbons – Distillates (848301-67-7)	
Viscosity, kinematic	2 – 4,5 mm²/s

Hydrocarbons, C10, aromatics, <1% naphthalene	
Viscosity, kinematic	< 2 mm²/s
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : This product contains hazardous components for the aquatic environment.
Ecology - water : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

C8-C26 branched and linear hydrocarbons – Distillates (848301-67-7)	
LC50 - Fish [1]	> 1000 mg/l @96h Pimephales promelas
EC50 - Crustacea [1]	> 1000 mg/l @48h Daphnia magna
EC50 - Other aquatic organisms [1]	> 1000 mg/l @72h Pseudokirchneriella subcapitata
NOEC (acute)	> 1000 mg/l @48h Daphnia magna

Hydrocarbons, C10, aromatics, <1% naphthalene	
LC50 - Fish [1]	96h 2 (≤ 5) mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	48h 3 (≤ 10) mg/l Daphnia magna
EC50 - Other aquatic organisms [1]	72h 1 (≤ 3) mg/l Pseudokirchneriella subcapitata
NOEC chronic fish	0,441 mg/l
NOEC chronic crustacea	0,771 mg/l
NOEC chronic algae	1 mg/l

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)	
LC50 - Fish [1]	96h 1,2 mg/l oncorhynchus mykiss
NOEC (acute)	72h 2 mg/l Desmodesmus subspicatus
NOEC (chronic)	> 0,01 (≤ 0,1) mg/l @21d daphnia magna

2,2'-iminodiethanol (111-42-2)	
LC50 - Fish [1]	96h 460 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	48h 30 mg/l Ceriodaphnia dubia
EC50 - Other aquatic organisms [1]	72h 9,5 mg/l pseudokirchneriella subcapitata
NOEC chronic crustacea	1,05 mg/l

12.2. Persistence and degradability

C8-C26 branched and linear hydrocarbons – Distillates (848301-67-7)	
Persistence and degradability	Readily biodegradable.

Hydrocarbons, C10, aromatics, <1% naphthalene	
Persistence and degradability	Readily biodegradable.
Biodegradation	50 %

Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) (68603-38-3)	
Persistence and degradability	biodegradable.

2,2'-iminodiethanol (111-42-2)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

C8-C26 branched and linear hydrocarbons – Distillates (848301-67-7)	
Partition coefficient n-octanol/water (Log Pow)	> 6,5 @40°C

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Remove to an authorized waste treatment plant. Avoid release to the environment.

European List of Waste (LoW) code : 18 01 06* - chemicals consisting of or containing dangerous substances
15 01 10* - packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no REACH substances with Annex XVII restrictions

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

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.

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Detergent Regulation (648/2004)

Labelling of contents	
Component	**%**
aromatic hydrocarbons	5-15%
non-ionic surfactants	<5%

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 49	Skin disorders caused by aliphatic, alicyclic amines or ethanolamines
RG 49 BIS	Respiratory disorders caused by aliphatic amines, ethanolamines or isophoronediamine

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) is listed
SZW-lijst van mutagene stoffen : Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) is listed
SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Class for fire hazard : Class III-1
Store unit : 50 liter
Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Switzerland

Storage class (LK) : LK 6.1 - Toxic materials

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.