



# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

MSDS Version: E06.01

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Blend Version: 9

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

#### 1.1. Product identifier

Product name : Radiator Flush

Product code : W56064

#### 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 : Cleaning of cooling systems from combustion engines.

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Wynn's Belgium  
Industriepark-West 46  
9100 Sint-Niklaas - Belgium  
T +32 3 766 60 20 - F +32 3 778 16 56  
[msds@wynns.eu](mailto:msds@wynns.eu) - [www.wynns.com](http://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]

Skin Irrit. 2 H315

Eye Irrit. 2 H319

Full text of hazard classes and H-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) :



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P102 - Keep out of reach of children.  
P280 - Wear eye protection, protective gloves.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

Detergent Regulation : Labelling of contents:(Regulation (EC) No. 648/2004 of 31 March 2004 on detergents):

Component	%
non-ionic surfactants, NTA (nitrilotriacetic acid) and salts thereof	<5%

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 3.2. Mixtures

Name	Product identifier	% w	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Nitilotriacetic acid trisodium salt monohydrate	(CAS-No.) 18662-53-8 (EC-No.) 225-768-6 (EC Index-No.) 607-620-00-6 (REACH-no) 01-2119519239-36	2,5 - 5	Carc. 2, H351 Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
alcohols,C11-14-iso, C13-rich, ethoxylated	(CAS-No.) 78330-21-9 (EC-No.) 616-609-5	1 - 2,5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
sodium acrylate	(CAS-No.) 9003-04-7	1 - 2,5	Eye Irrit. 2, H319
Sodium hydroxide	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	0,1 - 1	Met. Corr. 1, H290 Skin Corr. 1A, H314

Name	Product identifier	Specific concentration limits
Nitilotriacetic acid trisodium salt monohydrate	(CAS-No.) 18662-53-8 (EC-No.) 225-768-6 (EC Index-No.) 607-620-00-6 (REACH-no) 01-2119519239-36	(C >= 5) Carc. 2, H351
Sodium hydroxide	(CAS-No.) 1310-73-2 (EC-No.) 215-185-5 (EC Index-No.) 011-002-00-6 (REACH-no) 01-2119457892-27	( 0,5 =<C < 2) Skin Irrit. 2, H315 ( 0,5 =<C < 2) Eye Irrit. 2, H319 ( 2 =<C < 5) Skin Corr. 1B, H314 (C >= 5) Skin Corr. 1A, H314

Full text of H-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 or rash 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. Drink plenty of water. 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

No additional information available

### 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	: All extinguishing agents can be used.
Unsuitable extinguishing media	: None to our knowledge. If there is a fire close by, use suitable extinguishing agents.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: No fire hazard.
Explosion hazard	: Product is not explosive.

### 5.3. Advice for firefighters

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
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# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 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. 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 : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. 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 contaminated surfaces with an excess of water.

#### 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 : Presents no particular risk when handled in accordance with good occupational hygiene practice. Meet the legal requirements.  
Hygiene measures : Use good personal hygiene practices. IF ON SKIN: Wash with plenty of 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 : Meet the legal requirements. Store in a closed container. Keep out of frost.  
Storage area : Meet the legal requirements.  
Special rules on packaging : Labelling according to. Keep only in original container.

#### 7.3. Specific end use(s)

See product bulletin for detailed information.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Sodium hydroxide (1310-73-2)

Belgium	Limit value (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Belgium	Remark (BE)	M

##### reaction mass of (2S)- and (2R)-Alanine,N,N-bis(carboxymethyl)-, trisodium salt (164462-16-2)

###### DNEL/DMEL (Workers)

Acute - systemic effects, dermal	2000 mg/kg bodyweight/day
Acute - systemic effects, inhalation	40 mg/m <sup>3</sup>
Acute - local effects, dermal	2000 mg/cm <sup>2</sup>
Acute - local effects, inhalation	40 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	170 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	40 mg/m <sup>3</sup>
Long-term - local effects, inhalation	4 mg/m <sup>3</sup>

###### DNEL/DMEL (General population)

Acute - systemic effects, dermal	400 mg/kg bodyweight
Acute - systemic effects, inhalation	20 mg/m <sup>3</sup>
Acute - systemic effects, oral	85 mg/kg bodyweight
Acute - local effects, dermal	400 mg/cm <sup>2</sup>
Acute - local effects, inhalation	20 mg/m <sup>3</sup>
Long-term - systemic effects, oral	17 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	20 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	25 mg/kg bodyweight/day

# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### **reaction mass of (2S)- and (2R)-Alanine,N,N-bis(carboxymethyl)-, trisodium salt (164462-16-2)**

Long-term - local effects, inhalation	2 mg/m <sup>3</sup>
PNEC (Water)	
PNEC aqua (freshwater)	2 mg/l
PNEC aqua (marine water)	0,2 mg/l
PNEC aqua (intermittent, freshwater)	1 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	24 mg/kg dwt
PNEC (Soil)	
PNEC soil	2,5 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

### **sodium 4(or 5)-methyl-1H-benzotriazolide (64665-57-2)**

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8,8 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Acute - systemic effects, oral	0,54 mg/kg bodyweight
Long-term - systemic effects,oral	0,25 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	4,4 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0,25 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,008 mg/l
PNEC aqua (marine water)	0,008 mg/l
PNEC aqua (intermittent, freshwater)	0,086 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,0025 mg/kg dwt
PNEC sediment (marine water)	0,0025 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,0024 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	39,4 mg/l

### **Sodium hydroxide (1310-73-2)**

DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m <sup>3</sup>

### **Silicic acid, sodium salt (1344-09-8)**

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	1,59 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	5,61 mg/m <sup>3</sup>
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0,8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1,38 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0,8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	7,5 mg/l
PNEC aqua (marine water)	1 mg/l
PNEC aqua (intermittent, freshwater)	7,5 mg/l
PNEC (STP)	
PNEC sewage treatment plant	348 mg/l

## **8.2. Exposure 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.

# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Personal protective equipment : Gloves. Safety glasses.



Hand protection : Neoprene. Nitrile rubber. Polyvinylchloride (PVC). 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.

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 : light green.  
Odour : No data available  
Odour threshold : No data available  
pH : 12,23  
Relative evaporation rate (butylacetate=1) : No data available  
refraction index : 1,356  
Melting point : No data available  
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) : No data available  
Vapour pressure : No data available  
Relative vapour density at 20 °C : No data available  
Relative density : No data available  
Density @20°C : 1067 kg/m<sup>3</sup>  
Solubility : Soluble in water.  
Log Pow : No data available  
Log Kow : No data available  
Viscosity, kinematic @40°C : No data available  
Viscosity, dynamic @40°C : No data available  
Viscosity :  
Viscosity Index :  
Explosive properties : No data available  
Oxidising properties : No data available  
Explosive limits : No data available

### 9.2. Other information

VOC content : 0 %  
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 of use.

### 10.3. Possibility of hazardous reactions

No additional information available

# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 10.4. Conditions to avoid

No additional information available

### 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.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### alcohols,C11-14-iso, C13-rich, ethoxylated (78330-21-9)

LD50 oral rat 500 - 1999 mg/kg bodyweight

ATE CLP (oral) 500 mg/kg bodyweight

Skin corrosion/irritation : The mixture need not be classified as corrosive in spite of the extreme pH  
Causes skin irritation.  
pH: 12,23

Serious eye damage/irritation : Causes serious eye irritation.  
pH: 12,23

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : This product contains hazardous components for the aquatic environment. The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

#### Nitilotriacetic acid trisodium salt monohydrate (18662-53-8)

Threshold limit other aquatic organisms 1 800 mg/l (24 h; Daphnia magna; ANHYDROUS FORM)

#### alcohols,C11-14-iso, C13-rich, ethoxylated (78330-21-9)

LC50 fish 1 96h 10 - 100 mg/l

EC50 Daphnia 1 48h 10 - 100 mg/l

ErC50 (algae) 72h 10 - 100 mg/l

#### Sodium hydroxide (1310-73-2)

EC50 Daphnia 1 48h 40,4 mg/l Ceriodaphnia sp.

### 12.2. Persistence and degradability

#### Radiator Flush

Persistence and degradability The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

#### Nitilotriacetic acid trisodium salt monohydrate (18662-53-8)

Persistence and degradability Readily biodegradable in water. Biodegradable in the soil.

#### alcohols,C11-14-iso, C13-rich, ethoxylated (78330-21-9)

Persistence and degradability Readily biodegradable.

#### sodium acrylate (9003-04-7)

Persistence and degradability Not readily biodegradable in water.

# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 12.3. Bioaccumulative potential

#### Nitilotriacetic acid trisodium salt monohydrate (18662-53-8)

Bioaccumulative potential Bioaccumulation: not applicable.

#### sodium acrylate (9003-04-7)

Bioaccumulative potential Low potential for bioaccumulation (molecular mass  $\geq 700$  g/mol).

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. 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 : 20 01 29\* - detergents containing dangerous substances  
15 01 10\* - packaging containing residues of or contaminated by dangerous substances

## SECTION 14: Transport information

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

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

#### 14.6.1. Overland transport

No additional information available

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

No additional information available

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 0 %

# Radiator Flush

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

### 15.1.2. National regulations

Water hazard class (WGK) : 2 - significant hazard to waters

### 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
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.

*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*