

Det&Rinse

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/10/2019 Version: 2.2

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Trade name : Det&Rinse
Product code : DB1016A0

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Oven cleaners

1.3. Supplier

Unox Inc
987 Airlie Parkway
Denver, NC 28037
Phone 800-489-8669
Det.Rinse@unox.it

1.4. Emergency telephone number

Emergency number (24h/24) : Tel: 1.866.519.4752 (3E Company)
Access Code: 334577

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids, Category 4	H227	Combustible liquid
Corrosive to metals, Category 1	H290	May be corrosive to metals
Skin corrosion/irritation, Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H227 - Combustible liquid
H290 - May be corrosive to metals
H315 - Causes skin irritation
H318 - Causes serious eye damage

Precautionary statements (GHS-US) :
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P234 - Keep only in original container
P264 - Wash hands, forearms and face thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P302+P352 - If on skin: Wash with plenty of water/...
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center/doctor/...
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P370+P378 - In case of fire: Use media other than water to extinguish
P390 - Absorb spillage to prevent material damage

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P403+P235 - Store in a well-ventilated place. Keep cool
P406 - Store in a corrosion resistant container with a resistant inner liner
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Dipropylene glycol monomethyl ether-	(CAS No) 34590-94-8	1 - 5	Flam. Liq. 4, H227
potassium hydroxide, caustic potash	(CAS No) 1310-58-3	1 - 4.5	Met. Corr. 4, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Alcohols, C12-14, ethoxylated propoxylated	(CAS No) 68439-51-0	1 - 3	Not classified
D-Glucopyranose, oligomeric, decyl octyl glycosides	(CAS No) 68515-73-1	1 - 3	Eye Dam. 1, H318

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Self-protection of the first aider.
First-aid measures after inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention immediately.
First-aid measures after skin contact	: Immediately rinse with plenty of water (for at least 15 minutes). Remove contaminated clothing immediately and dispose of safely. Wash contaminated clothing before reuse. Seek medical attention immediately.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.
First-aid measures after ingestion	: Immediately call a POISON CENTER or doctor/ physician. Never give anything by mouth to an unconscious person. Do not induce vomiting.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation	: Corrosive to respiratory system. Causes burns.
Symptoms/injuries after skin contact	: Causes severe burns.
Symptoms/injuries after eye contact	: Causes serious eye damage. Corneal opacity. Iris lesions.
Symptoms/injuries after ingestion	: Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

4.3. Immediate medical attention and special treatment, if necessary

Keep under medical supervision for at least 48 hours. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water fog, carbon dioxide (CO2), dry chemical powder, foam.
Unsuitable extinguishing media	: Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	: Combustible. On burning: release of (highly) toxic gases/vapours.
Explosion hazard	: None known.
Reactivity	: Reacts exothermically with (some) acids. Reacts with (strong) oxidizers.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire	: Evacuate the personnel away from the fumes.
Firefighting instructions	: Cool down the containers exposed to heat with a water spray. Move undamaged containers from immediate hazard area if it can be done safely.

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Table with 2 columns: Category, Detail. Rows include Protective equipment for firefighters and Other information.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Table with 2 columns: Category, Detail. Rows include 6.1.1. For non-emergency personnel and Emergency procedures.

6.1.2. For emergency responders

Table with 2 columns: Category, Detail. Rows include Protective equipment and Emergency procedures.

6.2. Environmental precautions

Avoid release to the environment. Avoid sub-soil penetration. Relevant water authorities should be notified of any large spillage to water course or drain.

6.3. Methods and material for containment and cleaning up

Table with 2 columns: Category, Detail. Rows include For containment, Methods for cleaning up, and Other information.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Table with 2 columns: Category, Detail. Rows include Precautions for safe handling and Hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities

Table with 2 columns: Category, Detail. Rows include Technical measures, Storage conditions, Incompatible materials, Storage temperature, Heat and ignition sources, Information on mixed storage, Storage area, and Packaging materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Table with 2 columns: Category, Detail. Rows include potassium hydroxide, caustic potash (1310-58-3) and Alcohols, C12-14, ethoxylated propoxylated (68439-51-0).

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Table with 3 columns: Category, Detail, Value. Rows include D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1) and Dipropylene glycol monomethyl ether- (34590-94-8).

8.2. Appropriate engineering controls

Table with 2 columns: Category, Detail. Row includes Appropriate engineering controls.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Safety glasses. Gloves. Protective clothing. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

Materials for protective clothing:

Rubbers. PVC (Polyvinyl chloride). Natural fibres (e.g. cotton). (NIOSH-approved)

Hand protection:

Chemical resistant gloves (nitrile-rubber, PVC, neoprene). Break through time: ≥ 480 min. Thickness of glove material: 0.4-0.5 mm. Use equipment for hand protection tested and approved in accordance with OSHA requirements (29 CFR 1910.138)

Eye protection:

Chemical goggles or face shield with safety glasses. Do not wear contact lenses. Use equipment for eye protection tested and approved in accordance with OSHA requirements (29 CFR 1910.133)

Skin and body protection:

Wear work clothes with long sleeves. Wear suitable protective clothing or Rubber apron. (NIOSH-approved)

Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. (NIOSH-approved)



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Table with 2 columns: Category, Detail. Rows include Physical state, Colour, and Odour.

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Odour threshold	: No data available
pH	: 14 at 20°C
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.1 - 1.25 kg/l
Solubility	: soluble in water.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: Not expected to be explosive as none of the components is classified as explosive.
Oxidising properties	: Not oxidising.

9.2. Other information	
VOC content	: 4.6 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts exothermically with (some) acids. Reacts with (strong) oxidizers.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

Keep away from acids. Oxidizing agent. Peroxides.

10.5. Incompatible materials

Acids. Oxidizing agent. Peroxides. Flammable materials.

10.6. Hazardous decomposition products

On combustion or on thermal decomposition (pyrolysis) releases : Nitrogen oxides (NOx). Carbon dioxide (CO2). Phosphorus oxides. Sulfur oxides. Pyrolysis products, toxic.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

potassium hydroxide, caustic potash (1310-58-3)	
LD50 oral rat	333 mg/kg
ATE US (oral)	333.000 mg/kg bodyweight
Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
LD50 oral rat	> 2000 mg/kg
D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)	
LD50 oral rat	> 2000 mg/kg (OECD 423 method)
LD50 dermal rat	> 2000 mg/kg (OECD 402 method)

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Dipropylene glycol monomethyl ether- (34590-94-8)	
LD50 oral rat	5400 mg/kg
LD50 dermal rat	> 13000 mg/kg
ATE US (oral)	5400.000 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation. pH: 14 at 20°C
Serious eye damage/irritation	: Causes serious eye damage. pH: 14 at 20°C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure)	: Not classified
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Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Corrosive to respiratory system. Causes burns.
Symptoms/injuries after skin contact	: Causes severe burns.
Symptoms/injuries after eye contact	: Causes serious eye damage. Corneal opacity. Iris lesions.
Symptoms/injuries after ingestion	: Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

SECTION 12: Ecological information

12.1. Toxicity

potassium hydroxide, caustic potash (1310-58-3)	
LC50 fish 1	80 mg/l Gambusia affinis
Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
LC50 fish 1	1 - 10 mg/l (OECD 203 method)
EC50 Daphnia 1	1 - 10 (OECD 202 method)
EC50 other aquatic organisms 1	> 10000 mg/l Bacteria toxicity
D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)	
LC50 fish 1	> 100 mg/l Brachydario rerio
EC50 Daphnia 1	10 - 100 mg/l
NOEC chronic fish	1.8 mg/l Brachydanio rerio
NOEC chronic crustacea	1 mg/l Daphnia Magna
Dipropylene glycol monomethyl ether- (34590-94-8)	
LC50 fish 1	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	1919 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 other aquatic organisms 1	4168 mg/l Active sludge

12.2. Persistence and degradability

potassium hydroxide, caustic potash (1310-58-3)	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

Dipropylene glycol monomethyl ether- (34590-94-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	96 % 28 day

12.3. Bioaccumulative potential

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Bioaccumulative potential	Low bioaccumulation potential.

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potassium hydroxide, caustic potash (1310-58-3)	
Bioaccumulative potential	No bioaccumulation.
Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
Log Pow	< 1.77
Bioaccumulative potential	No bioaccumulation.
Dipropylene glycol monomethyl ether- (34590-94-8)	
Log Pow	0.004
Bioaccumulative potential	No bioaccumulation.
12.4. Mobility in soil	
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Ecology - soil	Expected to be highly mobile in soil.

12.5. Other adverse effects

Effect on global warming	: No known effects from this product.
GWPmix comment	: No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Reuse or recycle following decontamination. External recovery and recycling of waste should comply with applicable local and/or national regulations. Recycling is preferred to disposal or incineration.
Product/Packaging disposal recommendations	: Dispose of this material and its container at hazardous or special waste collection point.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT	
Transport document description	: UN1814 Potassium hydroxide, solution, 8, III

UN-No.(DOT)	: UN1814
Proper Shipping Name (DOT)	: Potassium hydroxide, solution
Class (DOT)	: 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT)	: III - Medium Danger
Hazard labels (DOT)	: 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx)	: 202
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Special Provisions (49 CFR 172.102)	: B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154

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DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 30 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 52 - Stow "separated from" acids
Emergency Response Guide (ERG) Number	: 154
Other information	: No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG)	: UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, III
UN-No. (IMDG)	: 1814
Proper Shipping Name (IMDG)	: POTASSIUM HYDROXIDE SOLUTION
Class (IMDG)	: 8 - Corrosive substances
Packing group (IMDG)	: III - substances presenting medium danger
Limited quantities (IMDG)	: 5 L

Air transport

Transport document description (IATA)	: UN 1814 Potassium hydroxide solution, 8, III
UN-No. (IATA)	: 1814
Proper Shipping Name (IATA)	: Potassium hydroxide solution
Class (IATA)	: 8 - Corrosives
Packing group (IATA)	: III - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:		
potassium hydroxide, caustic potash	CAS No 1310-58-3	1 - 4.5%
This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable minimum concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.		

Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).
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15.2. International regulations

CANADA

No additional information available

Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)	
Listed on the Canadian DSL (Domestic Substances List)	
D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)	
Listed on the Canadian DSL (Domestic Substances List)	
Dipropylene glycol monomethyl ether- (34590-94-8)	
Listed on the Canadian DSL (Domestic Substances List)	

EU-Regulations

No additional information available

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D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)
Listed on the EU NLP (No Longer Polymers) inventory
Dipropylene glycol monomethyl ether- (34590-94-8)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Alcohols, C12-14, ethoxylated propoxylated (68439-51-0)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
D-Glucopyranose, oligomeric, decyl octyl glycosides (68515-73-1)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on Turkish inventory of chemical
Dipropylene glycol monomethyl ether- (34590-94-8)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on the Canadian IDL (Ingredient Disclosure List) Listed on INSQ (Mexican National Inventory of Chemical Substances) Listed on Turkish inventory of chemical

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Other information : 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. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

Full text of H-statements:

H227	Combustible liquid
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

Abbreviations and acronyms:

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SDS	Safety Data Sheet
	CAS - Chemical Abstracts Service
	GHS - Globally Harmonised System
	CSR - Chemical Safety Report
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
DNEL	Derived-No Effect Level
EC50	Median effective concentration
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
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	PVC (Polyvinyl chloride).
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

SDS US (GHS HazCom 2012)

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