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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

**Trade name or designation of the mixture** ShineMaster™ Prep

**Registration number** -

**UFI:** S797-9RDR-0205-UY61

**Synonyms** Goodrich Part No. 74-451-179 and is part of Goodrich 74-451-Z Kit

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

**Identified uses** Cleaner.

**Uses advised against** None known.

**1.3. Details of the supplier of the safety data sheet****Manufacturer:**

**Company name** Goodrich Corporation  
Collins Aerospace, Interiors (Formerly De-icing and Specialty Systems)  
**Address** 1555 Corporate Woods Parkway  
Uniontown, Ohio 44685  
USA

**E-mail** Terry.Sluss@collins.com

**Contact name** EH&S Manager

**Telephone number** (330)374-4011

**Emergency telephone number** 1-703-741-5970.

**Supplier:**

**Company name** AAR International Incorporated

**Address** Berliner Allee 51-53  
30855 Langenhagen, Germany

**Telephone number** +49-511-978252-11

**Contact name** John Haywood

**E-mail** Hanover@aarcorp.com

**1.4. Emergency telephone number**

**General in EU** 112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)

**Supplied by:**

Roman Park, Roman Way  
Coleshill, West Midlands  
B46 1HG, UK  
T: 01675 432850  
E: [info@silmid.com](mailto:info@silmid.com)

+44 (0)1675 432850  
(Monday to Friday, 08:00 – 17:30 – GMT)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture**

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

**Classification according to Regulation (EC) No 1272/2008 as amended****Health hazards**

Skin corrosion/irritation	Category 1C	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

**2.2. Label elements**

**Label according to Regulation (EC) No. 1272/2008 as amended****Contains:** Ammonium hydroxide, Diethanolamine, Dodecyl benzene sulfonic acid, Triethanolamine**Hazard pictograms****Signal word**

Danger

**Hazard statements**

H314 Causes severe skin burns and eye damage.  
 H335 May cause respiratory irritation.

**Precautionary statements****Prevention**

P260 Do not breathe vapour.  
 P271 Use only outdoors or in a well-ventilated area.  
 P264 Wash thoroughly after handling.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P310 Immediately call a POISON CENTRE/doctor.  
 P363 Wash contaminated clothing before reuse.  
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage**

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
 P405 Store locked up.

**Disposal**

Not assigned.

**Supplemental information on the label**

None.

**2.3. Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The mixture does not contain any substances included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties at a concentration equal to or greater than 0.1% by weight. The mixture does not contain any substances having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1% by weight.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Triethanolamine	0,8 - < 2	102-71-6 203-049-8	-	-	
<b>Classification:</b> Eye Dam. 1;H318, Repr. 2;H361fd					
Diethanolamine	0,1 - < 0,3	111-42-2 203-868-0	-	603-071-00-1	
<b>Classification:</b> Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Skin Irrit. 2;H315, Eye Dam. 1;H318, STOT RE 2;H373					
Ammonium hydroxide	10 - 12	1336-21-6 215-647-6	-	007-001-01-2	
<b>Classification:</b> Skin Corr. 1;H314, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400					
Butoxyethanol	3 - 5	111-76-2 203-905-0	-	603-014-00-0	#
<b>Classification:</b> Acute Tox. 4;H302;(ATE: 1200 mg/kg bw), Skin Irrit. 2;H315, Eye Irrit. 2;H319					
Dodecyl benzene sulfonic acid	1 - 2	27176-87-0 248-289-4	-	-	
<b>Classification:</b> Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Skin Corr. 1B;H314, Eye Dam. 1;H318					

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
acrylic acid; prop-2-enoic acid	< 0,1	79-10-7 201-177-9	-	607-061-00-8	#
<p><b>Classification:</b> Flam. Liq. 3;H226, Acute Tox. 4;H302;(ATE: 500 mg/kg bw), Acute Tox. 4;H312;(ATE: 1100 mg/kg bw), Acute Tox. 3;H331;(ATE: 3 mg/l), Acute Tox. 4;H332, Skin Corr. 1A;H314, Eye Dam. 1;H318, STOT SE 3;H335, Aquatic Acute 1;H400</p> <p><b>Specific Concentration Limits:</b> STOT SE 3;H335: C ≥ 1 %</p>					

#### List of abbreviations and symbols that may be used above

ATE: Acute toxicity estimate.

#: This substance has been assigned Union workplace exposure limit(s).

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 4.1. Description of first aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Get medical advice or attention if symptoms develop or persist.

**Skin contact** Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

**Ingestion** Call a physician or poison control centre immediately. Rinse mouth. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**4.2. Most important symptoms and effects, both acute and delayed** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Causes digestive tract burns.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** No unusual fire or explosion hazards noted.

### 5.1. Extinguishing media

**Suitable extinguishing media** Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** During fire, gases hazardous to health may be formed such as: Carbon oxides. Hydrocarbons. Hydrogen cyanide. Ammonia. Nitrogen Oxides (NO<sub>x</sub>).

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** In case of fire do not breathe fumes.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** Avoid breathing mist/vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

**For emergency responders** Keep unnecessary personnel away. Ensure adequate ventilation. Avoid breathing mist/vapours. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.

- 6.2. Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
- 6.3. Methods and material for containment and cleaning up** This product is miscible in water. Prevent product from entering drains.
- Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
- Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
- Never return spills to original containers for re-use.
- 6.4. Reference to other sections** For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

- 7.1. Precautions for safe handling** Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Avoid release to the environment. Observe good industrial hygiene practices. Avoid breathing mist/vapours.
- 7.2. Conditions for safe storage, including any incompatibilities** Store locked up. Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS). Store in cool, dry, well ventilated area.  
Storage class (TRGS 510): 8A (Combustible corrosive substances)
- 7.3. Specific end use(s)** Cleaner. Observe industrial sector guidance on best practices.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
acrylic acid; prop-2-enoic acid (CAS 79-10-7)	TWA	30 mg/m3	
		10 ppm	
Ammonium hydroxide (CAS 1336-21-6)	TWA	14 mg/m3	
		20 ppm	
Butoxyethanol (CAS 111-76-2)	TWA	49 mg/m3	
		10 ppm	
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m3	Vapor and aerosol, inhalable fraction.
Triethanolamine (CAS 102-71-6)	TWA	1 mg/m3	Inhalable fraction.

##### Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
acrylic acid; prop-2-enoic acid (CAS 79-10-7)	AGW	30 mg/m3	
		10 ppm	
Butoxyethanol (CAS 111-76-2)	AGW	49 mg/m3	
		10 ppm	
Diethanolamine (CAS 111-42-2)	AGW	0,5 mg/m3	Vapour and aerosol.
		0,11 ppm	Vapour and aerosol.
Triethanolamine (CAS 102-71-6)	AGW	1 mg/m3	Inhalable fraction.

##### EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
acrylic acid; prop-2-enoic acid (CAS 79-10-7)	STEL	59 mg/m3

**EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU**

Components	Type	Value
Butoxyethanol (CAS 111-76-2)	TWA	20 ppm
		29 mg/m <sup>3</sup>
	STEL	10 ppm
		246 mg/m <sup>3</sup>
	TWA	50 ppm
		98 mg/m <sup>3</sup>
		20 ppm

**Biological limit values****Germany. TRGS 903, BAT List (Biological Limit Values)**

Components	Value	Determinant	Specimen	Sampling Time
Butoxyethanol (CAS 111-76-2)	150 mg/g	Butoxyessigsäure (nach Hydrolyse)	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Recommended monitoring procedures** Follow standard monitoring procedures.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

**Exposure guidelines****Germany DFG MAK (advisory): Skin designation**

Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.  
Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

**Germany TRGS 900 Limit Values: Skin designation**

Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.  
Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

**8.2. Exposure controls**

**Appropriate engineering controls** Good general ventilation 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. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

**General information** Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection** Wear safety glasses with side shields (or goggles) and a face shield. (EN 166)

**Skin protection**

**- Hand protection** Wear appropriate chemical resistant gloves. Glove material: Butyl rubber. Use gloves with breakthrough time of 240 minutes. Minimum glove thickness 13.8 mm. (EN 374)

**- Other** Wear appropriate chemical resistant clothing to prevent any possibility of skin contact. Wear suitable protective clothing.

**Respiratory protection** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respiratory protection should meet standard EN 14387.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures** Keep away from food and drink. 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.

**Environmental exposure controls** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Colour</b>	Clear.
<b>Odour</b>	Ammonia.
<b>Melting point/freezing point</b>	Property has not been measured.
<b>Boiling point or initial boiling point and boiling range</b>	> 27,78 - < 40,56 °C (> 82 - < 105 °F)
<b>Flammability</b>	Not flammable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	Property has not been measured.
<b>Explosive limit – upper (%)</b>	Property has not been measured.
<b>Flash point</b>	100 °C (212 °F) (Setaflash, Closed Cup)
<b>Auto-ignition temperature</b>	Property has not been measured.
<b>Decomposition temperature</b>	Property has not been measured.
<b>pH</b>	11
<b>Kinematic viscosity</b>	Property has not been measured.
<b>Solubility</b>	
<b>Solubility (water)</b>	Soluble in water.
<b>Partition coefficient (n-octanol/water) (log value)</b>	Not applicable, product is a mixture.
<b>Vapour pressure</b>	560 mmHg
<b>Density and/or relative density</b>	
<b>Relative density</b>	1,02
<b>Vapour density</b>	0,6 (air = 1)
<b>Particle characteristics</b>	Not applicable, material is a liquid.
<b>9.2. Other information</b>	
<b>9.2.1. Information with regard to physical hazard classes</b>	No relevant additional information available.
<b>9.2.2. Other safety characteristics</b>	
<b>Evaporation rate</b>	1 (Butyl acetate=1)
<b>Viscosity</b>	5000 mm <sup>2</sup> /s

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>10.4. Conditions to avoid</b>	Excessive heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>10.5. Incompatible materials</b>	Strong oxidising agents. Peroxides. Phenols.
<b>10.6. Hazardous decomposition products</b>	No hazardous decomposition products are known.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes severe skin burns.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Causes digestive tract burns.
<b>Symptoms</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Causes digestive tract burns.

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

#### Acute toxicity

Product	Species	Test Results
ShineMaster™ Prep (CAS Mixture)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	2765 mg/kg
Components	Species	Test Results
Ammonium hydroxide (CAS 1336-21-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	350 mg/kg
Butoxyethanol (CAS 111-76-2)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	470 mg/kg
Diethanolamine (CAS 111-42-2)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	675,8 - 2500 mg/kg 0,62 ml/kg

<b>Skin corrosion/irritation</b>	Causes severe skin burns.
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.
<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Skin sensitisation</b>	Due to partial or complete lack of data the classification is not possible.
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

acrylic acid; prop-2-enoic acid (CAS 79-10-7)	3 Not classifiable as to carcinogenicity to humans.
Butoxyethanol (CAS 111-76-2)	3 Not classifiable as to carcinogenicity to humans.
Diethanolamine (CAS 111-42-2)	2B Possibly carcinogenic to humans.
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.
<b>Aspiration hazard</b>	Due to partial or complete lack of data the classification is not possible.
<b>Mixture versus substance information</b>	No information available.

#### 11.2. Information on other hazards

<b>Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to human health as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.
<b>Other information</b>	Prolonged inhalation may be harmful.

## SECTION 12: Ecological information

**12.1. Toxicity** Toxic to aquatic life.

Components	Species	Test Results
Diethanolamine (CAS 111-42-2)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Aquatic invertebrates
Fish	LC50	Fish
<i>Chronic</i>		
Crustacea	EC50	Aquatic invertebrates
		11,82 mg/l, 21 days

Components	Species	Test Results
	LOEC	Aquatic invertebrates 1,56 mg/l, 21 days
	NOEC	Aquatic invertebrates 0,78 mg/l, 21 days
<b>12.2. Persistence and degradability</b>	No data is available on the degradability of any ingredients in the mixture.	
<b>12.3. Bioaccumulative potential</b>		
<b>Partition coefficient n-octanol/water (log Kow)</b>		
	Ammonium hydroxide (CAS 1336-21-6)	-2,66
	Butoxyethanol (CAS 111-76-2)	0,83
	Diethanolamine (CAS 111-42-2)	1,43
	Triethanolamine (CAS 102-71-6)	-1
	acrylic acid; prop-2-enoic acid (CAS 79-10-7)	0,35
<b>Bioconcentration factor (BCF)</b>	Not available.	
<b>12.4. Mobility in soil</b>	This product is miscible in water.	
<b>12.5. Results of PBT and vPvB assessment</b>	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.	
<b>12.6. Endocrine disrupting properties</b>	This mixture does not contain any substances having endocrine disrupting properties with respect to the environment as assessed in accordance with the criteria set out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605, at a concentration equal to or greater than 0.1% by weight.	
<b>12.7. Other adverse effects</b>	No data available.	
	<b>Substance Global Warming Potential per (Annex IV), Regulation 517/2014/EU on fluorinated greenhouse gases, as amended</b>	
	Ammonium hydroxide (CAS 1336-21-6)	0

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose in accordance with local regulations. Dispose of in accordance with local regulations. 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). Since emptied containers may retain product residue, follow label warnings even after container is
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Subsidiary risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

#### ADN

14.1. UN number	UN3266
14.2. UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Ammonium Hydroxide)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

#### IATA

14.1. UN number	UN3266
14.2. UN proper shipping name	Corrosive liquid, basic, inorganic, n.o.s. (Ammonium Hydroxide)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

14.1. UN number	UN3266
14.2. UN proper shipping name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Ammonium Hydroxide)
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

14.7. Maritime transport in bulk according to IMO instruments Not established.

## SECTION 15: Regulatory information

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

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Ammonium hydroxide (CAS 1336-21-6)

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

**Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended**

Not listed.

**Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended**

Not listed.

#### **Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

#### **National regulations**

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

#### **Water hazard class**

**AwSV**

WGK2

#### **15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

### **SECTION 16: Other information**

#### **List of abbreviations**

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
PBT: Persistent, bioaccumulative and toxic.  
EC50: Effective Concentration, 50%.  
LC50: Lethal Concentration, 50%.  
LOEC: Lowest Observed Effect Concentration.  
NOAEC: No observed adverse effect concentration.  
LD50: Lethal Dose, 50%.  
STEL: Short-Term Exposure Limit.  
ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.  
AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).  
CAS: Chemical Abstract Service.  
CEN: European Committee for Standardization.  
IATA: International Air Transport Association.  
IMDG: International Maritime Dangerous Goods.  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
vPvB: Very persistent and very bioaccumulative.

#### **References**

HSDB® - Hazardous Substances Data Bank  
ESIS (European chemical Substances Information System)  
CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures

#### **Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

#### **Full text of any statements, which are not written out in full under sections 2 to 15**

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.

H331 Toxic if inhaled.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

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