Safety Data Sheet

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

1.1. Product identification

Name	**DUEINUNO**
Chemical name and synonyms	**PACK AC 15**

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

Description/Use **Descaling acid.**

1.3. Details of the supplier of the safety data sheet

Company name	**Nuova Ricambi srl**
Address	**Via Dei Mille, 20**
City and Country	**20061 Carugate (MI)** **Italy**
	tel. 02 9253205
	fax 02 92157705
e-mail of the competent person,	
person responsible for the safety data sheet	**info@nuovaricambi.it**

1.4. Emergency telephone number

For urgent information contact **Poison Center: 02/66101029- Company headquarters: tel 02/9253205**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and amendments). Therefore the product requires a safety data sheet according to the provisions of Regulation (EC) 1907/2006 and subsequent amendments.
Further information on health and/or environmental hazards can be found in sections 11 and 12 of this sheet.

Classification and hazard statements:

Skin corrosion, category 1A	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.

2.2. Labeling elements.

Danger identification pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments.

Warnings: Hazard

Hazard statements:

H314	Causes severe skin burns and eye damage.

Precautionary statements:

P264	Wash thoroughly with water after handling.
P280	Wear protective gloves/protective clothing and eye protection/face protection.
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor / . . .

Contains:	NITRIC ACID sol. PHOSPHORIC ACID

2.3. Other hazards.

According to the available data, the product does not contain PBT or vPvB substances in a percentage higher than 0.1%.

SECTION 3. Ingredients/composition information.

3.1. Substances.

Information non applicable.

3.2. Mixtures.

Contains:

Identification.	**Conc. %.**	**Classification 1272/2008 (CLP).**
NITRIC ACID sol.		
CAS. 7697-37-2 EC. 231-714-2 INDEX. - Nr. Reg. 01-2119487297-23	20 - 40	Ox. Liq. 3 H272, Skin Corr. 1A H314, Note B
PHOSPHORIC ACID		
CAS. 7664-38-2 EC. 231-633-2 INDEX. - Nr. Reg. 01-2119485924-24	5 - 25	Met. Corr. 1 H290, Skin Corr. 1B H314, Note B

Note: Upper range value excluded.

The full text of the hazard statements (H) is given in section 16 of the sheet.

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if worn. Immediately flush eyes with plenty of water for at least 30/60 minutes while keeping eyelids raised. Seek medical advice immediately.
SKIN: Remove any contaminated clothing. Shower immediately. Seek medical advice immediately.
INGESTION: Make the person drink as much water as possible. Seek medical advice immediately. Do not induce vomiting unless expressly authorized to do so by the doctor.
INHALATION: Call a doctor immediately. Remove the person to fresh air, away from the place of the accident. If the person stops breathing, perform artificial respiration. Take suitable precautions for the first-aider.

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

For symptoms and effects caused by the contained substances see chap. 11.

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

Information not available.

SECTION 5. Firefighting measures

5.1. Extinguishing media.

APPROPRIATE EXTINGUISHING MEDIA
Use extinguishing equipment: carbon dioxide and chemical powder. For product losses and leakages that have not set on fire, water spray can be used to disperse the flammable vapors and protect those working to stop the leakage.
INAPPROPRIATE EXTINGUISHING MEDIA
Do not use water spray.
Water is not effective in extinguishing the fire, but can be used to cool closed containers exposed to the flames, preventing explosions.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Large amounts of the product involved in a fire may seriously worsen the situation. Avoid inhaling any combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION
In case of fire, cool the containers immediately to prevent the risk of explosion (product decomposition, excess pressure) and the development of substances that are potentially hazardous for the health. Always wear full fire protection equipment. Remove the product containers away from the fire if this can be done without risk.
EQUIPMENT
Normal firefighting clothing, such as self-contained, open-circuit compressed air breathing apparatus (EN 137), flameproof suit (EN469), flameproof gloves (EN 659) and Fire Brigade boots (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear appropriate protection devices (including personal protective equipment as listed in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid for both workers during handling and emergency interventions.

6.2. Environmental precautions

Do not allow the product to penetrate into sewers, surface and ground waters.

6.3. Methods and material for containment and cleaning up

Aspirate the leaked product into appropriate containers. Assess the compatibility of the container to use with the product, checking section 10. Absorb the remaining product with inert absorbent materials.
Make sure that the leakage site is well aired. Check any incompatibility of the materials with the containers in section 7. Contaminated material must be disposed of in compliance with the provisions laid down in point 13.

6.4. Reference to other sections

Any information concerning personal protection and disposal are given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safety handling

Ensure appropriate earthing for the systems and persons. Avoid contact with eyes and skin. Do not inhale any dust, vapors or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid release to the environment.

WARNING: do not store in containers other than the original one; risk of fatal errors if exchanged for drinks.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a well-ventilated place away from sources of ignition. Keep the containers hermetically sealed. Store the product in clearly labeled containers. Avoid overheating. Avoid violent knocks. Keep the containers away from any incompatible materials, check section 10.

7.3. Specific end use(s)

Information not available.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Reference Regulations:

CHE	Suisse / Schweiz	Valeurs limites d`exposition aux postes de travail 2012. / Grenzwerte am Arbeitsplatz
ITA	Italy	Legislative Decree no. 81 of 9 April 2008
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.
	TLV-ACGIH	ACGIH 2014

NITRIC ACID sol.

Threshold Limit Value

Type	State	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VEL	CHE	5	2	5	2
MAK	CHE	5	2	5	2
TLV	ITA			2.6	1
OEL	EU			2.6	1
TLV-ACGIH		5.2	2	10.3	4

Health - Derived no-effect level - DNEL / DMEL

Route of Exposure	Effects on consumers. Local acute	Systemic acute	Local chronic	Systemic chronic	Effects on workers Local acute	Systemic acute	Local chronic	Systemic chronic
Inhalation.							1.3 mg/m3	VND

PHOSPHORIC ACID

Threshold Limit Value

Type	State	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
VEL	CHE	1		2	
MAK	CHE	1		2	
TLV	ITA	1		2	
OEL	EU	1		2	
TLV-ACGIH		1		3	

Health - Derived no-effect level - DNEL / DMEL

Route of Exposure	Effects on consumers. Local acute	Systemic acute	Local chronic	Systemic chronic	Effects on workers Local acute	Systemic acute	Local chronic	Systemic chronic
Inhalation.							VND	2 mg/m3

Key:

(C) = CEILING ; INHALAB = Inhalable Fraction ; RESPIR = Respirable Fraction ; TORAC = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NHI = no hazard identified.

8.2. Exposure controls

Considering that the use of appropriate technical measures should always take priority over personal protective equipment, ensure that the working environment is well ventilated using a local aspiration system. Personal protective equipment must carry the CE marking to certify conformity to the regulations in force.

Provide emergency eye wash and shower facilities.

HAND PROTECTION
Protect the hands with category III work gloves (ref. EN 374).
In choosing appropriate work glove material consider: compatibility, degradation, breakage time and permeation.
Work glove resistance to chemical agents for preparations must be checked before use, as it could be unpredictable. Glove wear depends on the duration and methods of use.

SKIN PROTECTION
Wear category III professional work clothes with long sleeves and safety footwear (ref. Directive 89/686/EEC and standard EN ISO 20344). Wash with soap and water after removing protective clothing.

EYE PROTECTION
It is recommended to wear a protective hood or visor combined with airtight goggles (ref. standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) of the substance or one or more of the substances in the product is exceeded, wear a mask with an B type filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use. (ref. EN 14387). In the presence of gas or other types of vapors and/or gas or vapors with particles (aerosol, fumes, mist, etc.) use combined filters.
Respiratory protection must be used if the technical measures adopted are no sufficient to limit the exposure of the workers to the considered threshold values. The protection provided by masks is in any case limited.
If the substance in question is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear self-contained, open-circuit compressed air breathing apparatus (ref. EN 137) or fresh air hose breathing apparatus (ref. EN 138). Refer to standard EN 529 to choose the appropriate respiratory protection.

ENVIRONMENTAL EXPOSURE CONTROLS

Production process emissions, including those from ventilation equipment, must be checked in order to comply with environmental protection regulations.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Color	Colorless
Odor	Characteristic
Olfactory threshold.	Not available.
pH.	at 1%=1.83
Melting or freezing point	Not available.
Initial boiling point	Not available.
Boiling interval	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability of solids and gases	Not available.
Lower flammability limit	Not available.
Upper flammability limit	Not available.
Lower explosive limit	Not available.
Upper explosive limit	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.297 Kg/l
Solubility	Soluble in water
Partition coefficient: n-octanol/water	Not available.
Ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidizing properties	Not available.

9.2. Other information

VOC (Directive 1999/13/EC): 0
VOC (volatile carbon): 0

SECTION 10. Stability and reactivity

10.1. Reactivity

NITRIC ACID: decomposes at 84°C/183°F with risk of self-combustion.
PHOSPHORIC ACID: decomposes at temperatures above 200°C/392°F.

10.2. Chemical stability

Information not available.

10.3. Possibility of hazardous reactions

The product may react violently with water.

PHOSPHORIC ACID: explosion risk in contact with nitromethane. May cause hazardous reactions with alkalies and Sodium borohydride.

10.4. Conditions to avoid

Avoid overheating. Prevent water or humidity from entering the containers.

NITRIC ACID: exposure to heat and light.

10.5. Incompatible materials

NITRIC ACID: Flammable substances, reducing substances, alcohol, alkali substances and metals; acetone, acetic acid, acetic anhydride and some plastics.
PHOSPHORIC ACID: Metals, strong alkalies, aldehydes, sulfides and peroxides.

10.6. Hazardous decomposition products

NITRIC ACID: nitrogen oxides.
PHOSPHORIC ACID: phosphorus oxide.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

If no experimental toxicological data is available for the product, any health hazards have been assessed according to the properties of the contained substances, in line with the criteria laid down in the reference regulations for the classification. Therefore consider the concentration of any single

hazardous substances referred to in sect. 3, to assess the toxicological effects deriving from exposure to the product.
The product is corrosive and causes serious skin burns and blisters which may also appear after exposure. The burns can cause stinging and pain. On contact with eyes it causes severe lesions and can cause corneal opacity, damage to the iris, irreversible coloring of the eye. Any vapors and/or dust are caustic for the respiratory tract and can cause lung oedema, the symptoms of which may sometime appear only after several hours. Symptoms of exposure may include: a burning sensation, coughing, asthmatic breathing, laringitis, shortage of breath, nausea and vomiting. Ingestion can seriously burn the mouth, throat and esophagus; it may case vomiting, diarrhoea, oedema, swelling to the larynx and consequent suffocation. Severe cases may include the perforation of the gastrointestinal tract.
The product causes severe lesions and can cause corneal opacity, damage to the iris, irreversible colouring of the eye.

NITRIC ACID sol.
LC50 (Inhalation).67 ppm/4h Rat

PHOSPHORIC ACID
LD50 (Oral).1530 mg/kg Rat
LD50 (Skin).2740 mg/kg Rabbit
LC50 (Inhalation).> 0.85 mg/l/1h Rat

SECTION 12. Ecological information

Use this product according to good working practices; do not litter. Inform the competent authorities if the product reaches waterways or sewers or if it contaminates soil or vegetation.

12.1. Toxicity

PHOSPHORIC ACID

LC50 - Fish.	> 75 mg/l/96h

12.2. Persistence and degradability

NITRIC ACID sol.

Solubility in water.	> 1000000 mg/l

Biodegradability: Figures not Available.

PHOSPHORIC ACID

Solubility in water.	> 850000 mg/l

Biodegradability: Figures not Available.

12.3. Bioaccumulative potential

NITRIC ACID sol.

Partition coefficient: n-octanol/water.	< 3

12.4. Mobility in the soil

Information not available.

12.5. Results of PBT and vPvB assessment

According to the available data, the product does not contain PBT or vPvB substances in a percentage higher than 0.1%.

12.6. Other adverse effects

Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, if possible. Product residues are considered special hazardous waste. The hazard level of the waste which partially contains this product must be assessed according to the legal provisions in force.
The product must be disposed of by an authorized waste management company, in compliance with the national and any local laws.
Waste transport may be subject to the ADR.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recycling or disposal in compliance with the national waste management laws.

SECTION 14. Transport information

14.1. UN number.

ADR / RID, IMDG, IATA:	3264

14.2. UN shipping number.

ADR / RID:	CORROSIVE INORGANIC LIQUID, ACID, N.A.S. (Nitric acid, Phosphoric acid)
IMDG:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
IATA:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

14.3. Transport hazard classes.

ADR / RID:	Class: 8	Label: 8
IMDG:	Class: 8	Label: 8
IATA:	Class: 8	Label: 8

14.4. Packing group.

ADR / RID, IMDG, IATA:	II

14.5. Environmental hazards.

ADR / RID:	NO

14.6. Special precautions for users.

ADR / RID:	HIN - Kemler: -	Limited quantity 1l	Tunnel restriction code E
	Special provisions: 274		
IMDG:	EMS: F-A, S-B	Limited quantity 1l	
IATA:	Cargo:	Maximum quantity: -	Packing instructions: -
	Pass.:	Maximum quantity: -	Packing instructions: -
	Special instructions:	-	

14.7. Bulk transport according to annex II of MARPOL 73/78 and the IBC code.

Information non applicable.

SECTION 15. Regulatory information

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

Seveso category. None.

Restrictions to the product or the substances contained therein according to Annex XVII Regulation (EC) 1907/2006.

Product.
Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorization (Annex XIV REACH).

None.

Substances subject to export notification Reg. (EC) 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Health controls.

Workers exposed to this hazardous chemical agent must have their health monitored in accordance with the provisions of art. 41 of Italian Law (D.Lgs.) 81 of 9 April 2008 unless the worker's health and safety risk is deemed to be irrelevant, according to the provisions of art. 224 par. 2.

D.Lgs. 152/2006 and amendments.

Emissions:

WATER 50.04 %

15.2. Chemical safety assessment

No chemical safety assessment was drawn up for the mixture or the substances contained therein.

SECTION 16. Other information

Hazard statements (H) referred to in sections 2-3 of the sheet:

Ox. Liq. 3	Oxidizing liquid, category 3
Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
H272	May intensify fire; oxidizer.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

KEY:
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Half maximal effective concentration in the tested population
- EC NUMBER: Identification number in ESIS (European Chemical Substances Information System)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals
- IATA DGR: Dangerous Goods Regulations of the International Air Transport Association
- IC50: Half maximal inhibitory concentration in the tested population
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent Bioaccumulative and Toxic according to REACH

- PEC: Predicted environmental concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- TLV: Threshold Limit Value
- TLV CEILING: Absolute exposure limit that should not be exceeded at any time.
- TWA STEL: Spot exposure limit
- TWA: Time weighted average exposure
- VOC: Volatile organic compound
- vPvB: Very Persistent and very Bio-accumulative according to REACH
- WGK: Water hazard class (Germany).

GENERAL REFERENCES:
1. Regulation (EU) 1907/2006 of the European Parliament (REACH)
2. Regulation (EU) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 790/2009 of the European Parliament (I Atp.) CLP)
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 of the European Parliament (II Atp.) CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp.) CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp.) CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp.) CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp.) CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA Agency website

User notes:
The information contained in this sheet is based on the knowledge available to the producer on the date of the last version. It is the user's responsibility to satisfy himself that the information is complete and suitable for his own particular use.
The document must not be interpreted as a guarantee of any specific properties of the product.
As the use of the product is not under the direct control of the producer, the user is responsible for ensuring compliance with all hygiene and safety laws and provisions in force. No liability shall be accepted for improper use.
Train staff appropriately in the use of chemical products.

Amendments compared to the previous version.
Modifications have been made to the following sections:
14.

APPENDIX: EXPOSURE SCENARIOS - No.1

PHASE: TRANSFER OF THE PROFESSIONAL PRODUCT INTO CONTAINER (BUCKET/MACHINE) (ref AISE GEIS.8a .1.a.v1)-

Open transfer of a concentrated product (with or without diluting); the worker is directly exposed to the product.

OPERATING CONDITIONS

Maximum duration	50 minutes/day
Process conditions	Process performed at room temperature Dilute if required with tap water at a maximum temperature of 45 °C. Local exhaust ventilation (LEV) is not required; generally efficient ventilation in the work place is sufficient

RISK MANAGEMENT MEASURES

Conditions and measures concerning personal protective equipment (PPE), health and hygiene evaluation	Use gloves and protective goggles. See sect. 8 for specifications. Staff must be trained appropriately in use and maintenance 

GENERAL ADVICE

Do not eat, drink, smoke or use live flames	
Wash hands after use. Avoid contact with damaged skin Do not mix with other products	
Leakage instructions	Dilute with water and collect.
Additional advice	Follow the instructions on the label, the technical sheet and the SDS in sect. 7.

ENVIRONMENTAL MEASURES: Prevent the non-diluted product from reaching surface water.

PRODUCT COMPOSITION PROPERTIES

The classification of the concentrated product can be found on the label and in sect. 2 of the SDS
The product classification is based on the ingredient classification. The list of ingredients contributing to the product classification can be found in sect. 3 of the SDS.
The exposure evaluation is based on the key limit values of the ingredients indicated in sect. 8 of the SDS
The product may contain sensitizing components which may cause an allergic reaction in some people. Sect. 15 of the SDS lists these sensitizing components, where applicable to the product.

USE DESCRIPTORS

SU 22: Professional uses
PC 35: Washing and cleaning products (including solvent-based products)
PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
ERC 8a: Wide dispersive indoor use of processing aids in open systems

APPENDIX: EXPOSURE SCENARIOS- N.2

PHASE: TRANSFER OF PROFESSIONAL PRODUCT VIA A DEDICATED SYSTEM (BOTTLE/MACHINE)(ref. AISE GEIS. 8b. 1.a.v1)

Transfer of a product in a fully closed system. No exposure for the worker.

(e.g.: Venturi system or dosing pump)

OPERATING CONDITIONS

Maximum duration	40 minutes/day
Process conditions	Process performed at room temperature Local exhaust ventilation (LEV) is not required; generally efficient ventilation in the work place is sufficient

RISK MANAGEMENT MEASURES

Conditions and measures concerning personal protective equipment (PPE), health and hygiene evaluation	Personal protective equipment is not required.

GENERAL ADVICE

Do not eat, drink, smoke or use live flames	
Wash hands after use. Avoid contact with damaged skin Do not mix with other products	
Leakage instructions	Dilute with water and collect
Additional advice	Follow the instructions on the label, the technical sheet and the SDS in sect. 7.

ENVIRONMENTAL MEASURES: Prevent the non-diluted product from reaching surface water

PRODUCT COMPOSITION PROPERTIES

The classification of the concentrated product can be found on the label and in sect. 2 of the SDS
The product classification is based on the ingredient classification. The list of ingredients contributing to the product classification can be found in sect. 3 of the SDS.
The exposure evaluation is based on the key limit values of the ingredients indicated in sect. 8 of the SDS
The product may contain sensitizing components which may cause an allergic reaction in some people. Sect. 15 of the SDS lists these sensitizing components, where applicable to the product.

USE DESCRIPTORS

SU 22: Professional uses
PC 35: Washing and cleaning products (including solvent-based products)
PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
ERC 8a: Wide dispersive indoor use of processing aids in open systems

APPENDIX: EXPOSURE SCENARIOS-N.3

PHASE: USING A PROFESSIONAL PRODUCT IN A CLOSED SYSTEM (ref AISE GEIS 1.1.a.V1)

Use of a product in a fully closed system. The worker is not exposed to the product or its vapors (e.g. CIP washing, washing machines)

OPERATING CONDITIONS

Maximum duration	480 minutes/day
Process conditions	Process performed at room temperature Local exhaust ventilation (LEV) is not required; generally efficient ventilation in the work place is sufficient

RISK MANAGEMENT MEASURES

Conditions and measures concerning personal protective equipment (PPE), health and hygiene evaluation	Personal protective equipment is not required.

GENERAL ADVICE

Do not eat, drink, smoke or use live flames	
Wash hands after use. Avoid contact with damaged skin Do not mix with other products	
Leakage instructions	Dilute with water and collect
Additional advice	Follow the instructions on the label, the technical sheet and the SDS in sect. 7.

ENVIRONMENTAL MEASURES: Prevent the non-diluted product from reaching surface water

PRODUCT COMPOSITION PROPERTIES

The classification of the concentrated product can be found on the label and in sect. 2 of the SDS
The product classification is based on the ingredient classification. The list of ingredients contributing to the product classification can be found in sect. 3 of the SDS.
The exposure evaluation is based on the key limit values of the ingredients indicated in sect. 8 of the SDS
The product may contain sensitizing components which may cause an allergic reaction in some people. Sect. 15 of the SDS lists these sensitizing components, where applicable to the product.

USE DESCRIPTORS

SU 22: Professional uses
PC 35: Washing and cleaning products (including solvent-based products)
PROC 1: Use in a closed circuit; exposure improbable
ERC 8a: Wide dispersive indoor use of processing aids in open systems

APPENDIX: EXPOSURE SCENARIOS - No. 4
PHASE: USING A PROFESSIONAL PRODUCT IN A SEMI CLOSED SYSTEM (ref AISE GEIS 2.1.a.V1)
Using a product in a machine where the worker could be exposed to the product/vapors
(e.g.: Tunnel washsing)
OPERATING CONDITIONS

Maximum duration	480 minutes/day
Process conditions	Process performed at room temperature Local exhaust ventilation (LEV) is not required; generally efficient ventilation in the work place is sufficient

RISK MANAGEMENT MEASURES

Conditions and measures concerning personal protective equipment (PPE), health and hygiene evaluation	Personal protective equipment is not required.

GENERAL ADVICE

Do not eat, drink, smoke or use live flames	
Wash hands after use. Avoid contact with damaged skin Do not mix with other products	
Leakage instructions	Dilute with water and collect
Additional advice	Follow the instructions on the label, the technical sheet and the SDS in sect. 7.

ENVIRONMENTAL MEASURES: Prevent the non-diluted product from reaching surface water
PRODUCT COMPOSITION PROPERTIES

The classification of the concentrated product can be found on the label and in sect. 2 of the SDS
The product classification is based on the ingredient classification. The list of ingredients contributing to the product classification can be found in sect. 3 of the SDS.
The exposure evaluation is based on the key limit values of the ingredients indicated in sect. 8 of the SDS
The product may contain sensitizing components which may cause an allergic reaction in some people. Sect. 15 of the SDS lists these sensitizing components, where applicable to the product.

USE DESCRIPTORS

SU 22: Professional uses
PC 35: Washing and cleaning products (including solvent-based products)
PROC 2: Use in closed, continuous process with occasional controlled exposure
ERC 8a: Wide dispersive indoor use of processing aids in open systems