Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

REMOVER PRO

Date of first edition: 4/20/2021

Safety Data Sheet dated 8/8/2022

version 3

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

1.1. Product identifier

Mixture identification:

Trade name: REMOVER PRO

Trade code: B0151 .012

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

Recommended use: detergent

Uses advised against: Data not available.

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Kerakoll Italy - +39-0536-816511

Ireland

Poison information centre: 01 809 2166 (Daily 8am-10pm)

In case of emergency call 999 or 112

Malta

In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Eye Dam. 1 Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Pictograms and Signal Words

Danger

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P280 Wear protective gloves and eye protection.

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 doctor.

Contains

Alcohols, C12-15, branched and linear, ethoxylated

Regulation (EC) nr 648/2004 (Detergents).

Product contents:

non-ionic surfactants	5-15%
aliphatic hydrocarbons	15-30%
phosphates	< 5%

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: REMOVER PRO

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
10-19,9 %	(2-methoxymethylethoxy)propanol	CAS:34590-94-8 EC:252-104-2	[1,3,OEL]	01-2119450011-60
5-9,9 %	Alcohols, C12-15, branched and linear, ethoxylated	CAS:106232-83-1	Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412	
1-2,4 %	Tetrapotassium pyrophosphate	CAS:7320-34-5 EC:230-785-7	Eye Irrit. 2, H319	01-2119489369-18

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhaltion of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Notes
(2-methoxymethylethoxy)propanol	NATIONAL	ITALY		308.000	50.000			
	EU	NNN		308.000	50.000			
2,2',2''-nitrilotriethanol	ACGIH	NNN		5				Eye and skin irr
propan-2-ol; isopropyl alcohol; isopropanol	NATIONAL	AUSTRALIA		983.000	400.000	1230.000	500.000	
	NATIONAL	AUSTRIA		500.000	200.000	2000.000	800.000	
	NATIONAL	BELGIUM		500.000	200.000	1000.000	400.000	

NATIONAL	CANADA			200.000		400.000	Ontario
NATIONAL	CANADA		983.000	400.000	1230.000	500.000	Quebec
NATIONAL	DENMARK		490.000	200.000	980.000	400.000	
NATIONAL	FINLAND		500.000	200.000	620.000	250.000	
NATIONAL	FRANCE				980.000	400.000	
NATIONAL	GERMANY		500.000	200.000	1000.000	400.000	AGS
NATIONAL	GERMANY		500.000	200.000	1000.000	400.000	DFG
NATIONAL	HUNGARY		500.000		2000.000		
NATIONAL	IRELAND			200.000		400.000	
NATIONAL	JAPAN			400.000			MHLW
NATIONAL	JAPAN	C	980.000	400.000			JSOH
NATIONAL	LATVIA		350.000		600.000		
NATIONAL	NEW ZEALAND		983.000	400.000	1230.000	500.000	
NATIONAL	CHINA		350.000		700.000		
NATIONAL	POLAND		900.000		1200.000		
NATIONAL	ROMANIA		200.000	81.000	500.000	203.000	
NATIONAL	SINGAPORE		983.000	400.000	1230.000	500.000	
NATIONAL	KOREA, REPUBLIC OF		480.000	200.000	980.000	400.000	
NATIONAL	SPAIN		500.000	200.000	1000.000	400.000	
NATIONAL	SWEDEN		350.000	150.000	600.000	250.000	
NATIONAL	SWITZERLAND		500.000	200.000	1000.000	400.000	
NATIONAL	UNITED STATES OF AMERICA		980.000	400.000	1225.000	500.000	NIOSH
NATIONAL	UNITED STATES OF AMERICA		980.000	400.000			OSHA
NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		999.000	400.000	1250.000	500.000	
NATIONAL	ITALY		492.000	200.000	983.000	400.000	
NATIONAL	ARGENTINA			400.000		500.000	
NATIONAL	BULGARIA		980.000		1225.000		
NATIONAL	CZECHIA		500.000		1000.000		
NATIONAL	CHILE		858.000	358.000	1230.000	500.000	
NATIONAL	CROATIA		999.000	400.000	1250.000	500.000	
NATIONAL	ESTONIA		350.000	150.000	600.000	250.000	
NATIONAL	GREECE		980.000	400.000	1225.000	500.000	
NATIONAL	INDONESIA		983.000	400.000	1230.000	500.000	
NATIONAL	ICELAND		490.000	200.000			
NATIONAL	LITHUANIA		350.000	150.000	600.000	250.000	
NATIONAL	MALAYSIA		49.000	10.000			
NATIONAL	MEXICO			200.000		400.000	
NATIONAL	NORWAY		245.000	100.000			
NATIONAL	NETHERLANDS		650.000	250.000			
NATIONAL	PORTUGAL			200.000		400.000	
NATIONAL	RUSSIAN FEDERATIO		10.000		50.000		

		N					
	NATIONAL	SLOVAKIA	500.000	200.000	1000.000	400.000	
	NATIONAL	SLOVENIA	500.000	200.000	1000.000	400.000	
	ACGIH	NNN		200		400	A4, BEI - Eye and URT irr, CNS impair
2,2'-iminodiethanol; diethanolamine	NATIONAL	AUSTRALIA	13.000	3.000			
	NATIONAL	AUSTRIA	2.000	0.460			
	NATIONAL	BELGIUM	1.000	0.200			Inhalable fraction and vapour
	NATIONAL	CANADA	1.000				Ontario; Inhalable aerosol and vapour
	NATIONAL	CANADA	13.000	3.000			Québec; Inhalable aerosol and vapour
	NATIONAL	DENMARK	2.000	0.460	4.000	0.920	
	NATIONAL	FINLAND	2.000	0.460			
	NATIONAL	FRANCE	15.000	3.000			
	NATIONAL	GERMANY	0.500	0.110	0.500	0.110	AGS; long term and short term: inhalable fraction and vapour; The reaction with nitrosating agents may lead to the formation of the corresponding carcinogenic N-nitrosoamines
	NATIONAL	GERMANY	1.000		1.000		DFG; Long term and short term: inhalable fraction and vapour
	NATIONAL	IRELAND	1.000				
	NATIONAL	NEW ZEALAND	13.000	3.000			
	NATIONAL	POLAND	9.000				
	NATIONAL	SINGAPORE	2.000	0.460			
	NATIONAL	KOREA, REPUBLIC OF	2.000	0.460			
	NATIONAL	SPAIN	2.000	0.460			
	NATIONAL	SWEDEN	5.000	3.000	30.000	6.000	
	NATIONAL	SWITZERLAND	1.000		1.000		Long term and short term: inhalable aerosol
	NATIONAL	UNITED STATES OF AMERICA	15.000	3.000			NIOSH
	NATIONAL	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	13.000	3.000			
	ACGIH	NNN	1				(IFV), Skin, A3 - Liver and kidney dam

Derived No Effect Level (DNEL) values

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency
(2-methoxymethylethoxy) propanol	34590-94-8	mg/cm²				
Tetrapotassium pyrophosphate	7320-34-5		17.630 mg/m³	4.350 mg/m³	Human Inhalation	Long Term, systemic effects

8.2. Exposure controls

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Neoprene, Nitrile rubber.

Respiratory protection:

N.A.

Thermal Hazards:

N.A.

Environmental exposure controls:

N.A.

Hygienic and Technical measures

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Liquid

Color: Colourless

Odour: Like: Alcohol

Odour threshold: N.A.

pH: Not Relevant

Kinematic viscosity: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 100 °C (212 °F)

Flash point: 79 °C (174 °F)

Upper/lower flammability or explosive limits: 14.00 % (UEL). 11.00 % (LEL).

Vapour density: N.A.

Vapour pressure: 23.00 hPa

Relative density: 1.00 g/cm3

Solubility in water: Soluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: 270.00 °C

Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic compounds - VOCs = 15.01 % ; 150.09 g/l

Particle characteristics:

Particle size: N.A.

9.2. Other information

Miscibility: N.A.

Conductivity: N.A.

Evaporation rate: N.A. No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified
	Based on available data, the classification criteria are not met
c) serious eye damage/irritation	The product is classified: Eye Dam. 1(H318)
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Alcohols, C12-15, branched and linear, ethoxylated	a) acute toxicity	LD50 Oral > 300.00 mg/kg	
Tetrapotassium pyrophosphate	a) acute toxicity	LD50 Oral Rat > 300.00 mg/kg	<2000 mg/kg
		LC50 Inhalation Dust Rat > 1.10 mg/l	
		LD50 Skin Rabbit > 2000.00 mg/kg 24h	
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h	
	c) serious eye damage/irritation	Eye Irritant Rabbit Yes	
	d) respiratory or skin sensitisation	Skin Sensitization Negative	Mouse
	f) carcinogenicity	Genotoxicity Rat Negative	
	g) reproductive toxicity	No Observed Adverse Effect Level Oral Rat > 169.00 mg/kg	

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
Alcohols, C12-15, branched and linear, ethoxylated	CAS: 106232-83-1	a) Aquatic acute toxicity : LC50 Fish Carassius Auratus < 10.00 mg/L 96h CESIO
		a) Aquatic acute toxicity : EC50 Honeybees Daphnie < 10.00 mg/L 48h CESIO

Tetrapotassium pyrophosphate	CAS: 7320-34-5 - EINECS: 230-785-7	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 100.00 mg/L ,,OECD Guideline 203 (Fish, Acute Toxicity Test) a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 100.00 mg/L 48h ,,EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids) a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus > 100.00 mg/L 72h ,,OECD Guideline 201 (Alga, Growth Inhibition Test) a) Aquatic acute toxicity : EC50 microorganisms > 1000.00 mg/L 3h EU Method C.11 (Biodegradation: Activated Sludge Respiration Inhibition Test) d) Terrestrial toxicity : LC50 Worm Eisenia fetida > 3500.00 mg/kg ,,OECD Guideline 207 (Earthworm, Acute Toxicity Tests)

12.2. Persistence and degradability

Component	Persitence/Degradability:	Duration	Notes
Alcohols, C12-15, branched and linear, ethoxylated	Readily biodegradable	28d	>70%

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.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

HP 4: Irritant — skin irritation and eye damage

SECTION 14: Transport information

14.1. UN number or ID number

N/A

14.2. UN proper shipping name

ADR-Shipping Name: N/A

IATA-Technical name: N/A

IMDG-Technical name: N/A

14.3. Transport hazard class(es)

ADR-Class: N/A

IATA-Class: N/A

IMDG-Class: N/A

14.4. Packing group

ADR-Packing Group: N/A

IATA-Packing group: N/A

IMDG-Packing group: N/A

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: N/A

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: N/A

ADR - Hazard identification number: N/A

ADR-Special Provisions: N/A

ADR-Transport category (Tunnel restriction code): N/A

ADR Limited Quantities: N/A

ADR Excepted Quantities: N/A

Air (IATA) :

IATA-Passenger Aircraft: N/A

IATA-Cargo Aircraft: N/A

IATA-Label: N/A

IATA-Subsidiary hazards: N/A

IATA-Erg: N/A

IATA-Special Provisioning: N/A

Sea (IMDG) :

IMDG-Stowage Code: N/A

IMDG-Stowage Note: N/A

IMDG-Subsidiary hazards: N/A

IMDG-Special Provisioning: N/A

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Regulation (EU) n. 2021/643 (ATP 16 CLP)

Regulation (EU) n. 2020/878

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 40, 75

Provisions related to directive EU 2012/18 (Seveso III):

N.A.

Regulation (EU) 649/2012 (PIC regulation):

No Substance Listed

German Water Hazard Class.

Class 2: hazardous for water.

SVHC Substances:

No data available

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.3/1	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

IC50: half maximal inhibitory concentration

ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep Away From Heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION

Exposure Scenario
Tetrapotassium pyrophosphate

Exposure Scenario, 09/06/2022

Substance identity	
	Tetrapotassium pyrophosphate
CAS No.	7320-34-5
EINECS No.	230-785-7
Registration number	01-2119489369-18

Table of contents

1. ES 1 Widespread use by professional workers; Various products (PC1, PC9a, PC9b)

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks - Use in rigid foams, coatings, adhesives and sealants
Date - Version	09/06/2022 - 1.0
Life Cycle Stage	Widespread use by professional workers
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Adhesives, sealants (PC1) - Coatings and paints, thinners, paint removers (PC9a) - Fillers, putties, plasters, modelling clay (PC9b)

Environment Contributing Scenario	
CS1	ERC8a - ERC8c - ERC8d

Worker Contributing Scenario	
CS2 Material transfers - Rolling, Brushing	PROC8a - PROC10
CS3 Material transfers - Rolling, Brushing	PROC8a - PROC10

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8c, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use leading to inclusion into/onto article (indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8c, ERC8d)

Product (article) characteristics

Physical form of product:
Solid, medium dustiness

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use (or from service life)

Emission days: 365 days per year

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
Dispose of waste product or used containers according to local regulations.
Incineration, disposal or recycling at specific offsite provider

1.2. CS2: Worker Contributing Scenario: Material transfers - Rolling, Brushing (PROC8a, PROC10)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Roller application or brushing (PROC8a, PROC10)

Product (article) characteristics

Concentration of substance in product:
Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:
Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear a full face respirator conforming to EN136.	Inhalation - minimum efficiency of: 90 %
Wear suitable gloves tested to EN374. Use suitable eye protection. Wear suitable coveralls to prevent exposure to the skin. Wear a respirator conforming to EN140.	

Other conditions affecting worker exposure

Indoor use
Professional use

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Wear suitable coveralls to prevent exposure to the skin.

1.2. CS3: Worker Contributing Scenario: Material transfers - Rolling, Brushing (PROC8a, PROC10)

Process Categories	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities - Roller application or brushing (PROC8a, PROC10)

Product (article) characteristics

Concentration of substance in product:

Covers percentage substance in the product up to 100 %.

Amount used, frequency and duration of use/exposure

Duration:

Covers daily exposures up to 8 hours

Technical and organisational conditions and measures

Technical and organisational measures

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear a full face respirator conforming to EN136.	Inhalation - minimum efficiency of: 90 %
Wear suitable gloves tested to EN374. Use suitable eye protection. Wear suitable coveralls to prevent exposure to the skin. Wear a respirator conforming to EN140.	

Other conditions affecting worker exposure

Outdoor use
Professional use

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:

Wear suitable coveralls to prevent exposure to the skin.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8c, ERC8d)

Additional information on exposure estimation:

As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

1.3. CS2: Worker Contributing Scenario: Material transfers - Rolling, Brushing (PROC8a, PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.5 mg/m³	ECETOC TRA worker v3	0.0113

1.3. CS3: Worker Contributing Scenario: Material transfers - Rolling, Brushing (PROC8a, PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	0.35 mg/m³	ECETOC TRA worker v3	0.0079

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.