POR-15 Rust Preventive Coating - Gloss Black

SECTION 1: Identification

Product identifier

Product name: POR-15 Rust Preventive Coating - Gloss Black
Product code: 45001; 45004; 45005; 45008; 45032; 45055; 245001; 245004; 245005; 245008; 245032; 245055

Recommended use of the product and restriction on use

Relevant identified uses: Paints and coatings.
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:
United States
P.O.R. Products
38 Portman Road
New Rochelle, NY 10801
914-636-0700

Emergency telephone number:

United States
ChemTel Inc.
+1 800 255 3924
+1 813 248 0585

SECTION 2: Hazard(s) identification

GHS classification:

Flammable liquids, category 3
Eye irritation, category 2A
Skin irritation, category 2
Skin sensitization, category 1
Respiratory sensitization, category 1
Aspiration hazard, category 1
Acute toxicity (inhalation), category 4
Specific target organ toxicity - single exposure, category 3, respiratory irritation
Specific target organ toxicity - single exposure, category 3, central nervous system
Specific target organ toxicity - repeated exposure, category 1
Carcinogenicity, category 2

Label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:

H226 Flammable liquid and vapor
H319 Causes serious eye irritation

H315 Causes skin irritation
H317 May cause an allergic skin reaction
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H304 May be fatal if swallowed and enters airways
H332 Harmful if inhaled
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H372 Causes damage to organs through prolonged or repeated exposure
H351 Suspected of causing cancer
H315+H320 Causes skin and eye irritation.
H302+H332 Harmful if swallowed or if inhaled.
H312+H332 Harmful in contact with skin or if inhaled.
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking
P233 Keep container tightly closed
P240 Ground/bond container and receiving equipment
P241 Use explosion-proof electrical/ventilating/light/equipment
P242 Use only non-sparking tools
P243 Take precautionary measures against static discharge
P280 Wear protective gloves/protective clothing/eye protection/face protection
P264 Wash skin thoroughly after handling
P272 Contaminated work clothing should not be allowed out of the workplace
P285 In case of inadequate ventilation wear respiratory protection
P271 Use only outdoors or in a well-ventilated area
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P270 Do not eat, drink or smoke when using this product
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P284 Wear respiratory protection.
P281 Use personal protective equipment as required.
P303+P361+P353 If on skin (or hair): Immediately remove/take off all contaminated clothing. Rinse skin with water/shower
P370+P378 In case of fire: Use agents recommended in section 5 for extinction
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P321 Specific treatment (see supplemental first aid instructions on this label).
P362 Take off contaminated clothing and wash before reuse
P302+P352 If on skin: Wash with soap and water
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention
P331 Do not induce vomiting
P301+P310 If swallowed: Immediately call a poison center or doctor/physician
P304+P340+P312 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell
P308+P313 If exposed or concerned: Get medical advice/attention
P337+P313 If eye irritation persists get medical advice/attention
P332+P313 If skin irritation occurs: Get medical advice/attention
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P304+P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P314 Get medical advice/attention if you feel unwell
P405 Store locked up
P403+P233 Store in a well ventilated place. Keep container tightly closed
P403+P235 Store in a well ventilated place. Keep cool.
P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 95-63-6	1, 2, 4-Trimethylbenzene	<6
CAS number: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	15-20
CAS number: 1333-86-4	Carbon Black	<3
CAS number: 1330-20-7	Xylene	<0.5
CAS number: 52747-01-0	Propanol, ((1-methyl-1,2-ethanediyl)bis(oxy))bis-, polymer with 1,1'-methylenebis(4-isocyanatobenzene)	8-18
CAS number: 64742-95-6	Solvent naphtha (petroleum), light arom.	15-20
CAS number: 9016-87-9	Isocyanic acid, polymethylenepolyphenylene ester	1-5
CAS number: 26447-40-5	Methylenediphenyl diisocyanate	2-7
CAS number: 101-68-8	4,4'-Methylenediphenyl diisocyanate	5-12
CAS number: 98-82-8	Cumene	<0.5
CAS number: 67815-87-6	Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	27-47

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Get medical attention if you feel unwell

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell

Take precautions to ensure your own safety
Remove source of exposure or move person to fresh air
Get medical advice if you feel unwell or concerned

After skin contact:

Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention
Take off all contaminated clothing
Gently blot or brush away excess product
Wash with plenty of lukewarm, gently flowing water
Get medical advice if skin irritation occurs or you feel unwell

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention
Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open
Remove contact lenses, if present and easy to do so
Continue rinsing for 15-20 minutes
Get medical advice if eye irritation persists

After swallowing:

Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

May cause breathing difficulty, asthma attack, nausea, allergic reaction

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Contains isocyanates, consult literature for specific treatment

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam

Unsuitable extinguishing media:

Do not use a water stream as an extinguisher

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors
Vapors can flow to distant ignition sources and flashback
Liquid is volatile and may generate an explosive atmosphere

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Shut off sources of ignition
Carbon monoxide and carbon dioxide may form upon combustion

Heating causes a rise in pressure, risk of bursting and combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing
Beware of vapors accumulating to form explosive concentrations
Vapors can accumulate in low areas

Environmental precautions:

Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing
Use spark-proof tools and explosion-proof equipment
Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)
Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.
Take precautionary measures against electrostatic discharges.
Use only non-sparking tools.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Protect from freezing and physical damage.
Store in a cool, well-ventilated area.
Store away from all ignition sources (open flames, hot surfaces, direct sunlight, spark sources).

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	4,4'-Methylenediphenyl diisocyanate	101-68-8	ACGIH TLV TWA: 0.0050 ppm
	Xylene	1330-20-7	ACGIH TWA: 100.0 ppm
	Xylene	1330-20-7	ACGIH STEL: 150.0 ppm
	Carbon Black	1333-86-4	TLV-TWA 3.0 mg/m³
	Cumene	98-82-8	ACGIH TLV TWA: 50 ppm
United States (OSHA)	Carbon Black	1333-86-4	OSHA PEL TWA 3.5 mg/m³
	4,4'-Methylenediphenyl diisocyanate	101-68-8	OSHA C 0.02 ppm, 0.2 mg/m³
	Xylene	1330-20-7	STEL: 655 mg/m³ (150 ppm)

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Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Xylene	1330-20-7	OSHA TWA: 435.0 mg/m³ (100.0 ppm)
	Cumene	98-82-8	OSHA PEL TWA 50 ppm, 245.0 mg/m³
	Naphtha (petroleum), hydrotreated heavy	64742-48-9	OSHA Z-1 TWA 500 ppm (2,000 mg/m³)
NIOSH	4,4'-Methylenediphenyl diisocyanate	101-68-8	NIOSH REL TWA 0.0050 ppm, 0.05 mg/m³
	4,4'-Methylenediphenyl diisocyanate	101-68-8	NIOSH REL C 0.2 ppm, 0.2 mg/m³
	Carbon Black	1333-86-4	NIOSH REL TWA 0.1 mg PAHs/m3 [Carbon black in presence of polycyclic aromatic hydrocarbons (PAHs)]
	Carbon Black	1333-86-4	NIOSH REL TWA 3.5 mg/m³ Ca
	Xylene	1330-20-7	REL TWA: 435.0 mg/m³ (100.0 ppm)
	Xylene	1330-20-7	REL ST: 655 mg/m³ (150 ppm)
	Cumene	98-82-8	NIOSH REL TWA 50 ppm, 245.0 mg/m³
	1, 2, 4-Trimethylbenzene	95-63-6	NIOSH REL TWA 25 ppm, 125.0 mg/m³
Australia	Xylene	1330-20-7	TWA: 350 mg/m³ (80 ppm) ; STEL: 655 mg/m³ (150 ppm)
	4,4'-Methylenediphenyl diisocyanate	101-68-8	TWA: 0.02 mg/m³; STEL: 0.07 mg/m³
	Cumene	98-82-8	TWA: 125 mg/m³ (25 ppm) ; STEL: 375 mg/m³ (75 ppm)
	Carbon Black	1333-86-4	TWA: 3 mg/m³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.
Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Use explosion-proof ventilation equipment.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.
Wear appropriate clothing to prevent any possibility of skin contact.

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.

General hygienic measures:

Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of work.
Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Gloss Black Colored Liquid
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
Melting point/freezing point	Not determined or not available.
Initial boiling point/range	>284°F (>140°C)
Flash point (closed cup)	>106°F (>41°C)
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	38 mmHg
Vapor density	Not determined or not available.
Density	1.04 g/mL
Relative density	Not determined or not available.
Solubilities	Not miscible.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	200-500 cPs
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

VOC Content	295 g/L (US EPA Method 24A)
Recommended Storage Temperature	50°F - 95°F
Recommended Shelf Life	3 Years Un-Opened

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

Keep away from heat, sparks and flames.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Harmful if inhaled

Product data: No data available.

Substance data:

Name	Route	Result
Isocyanic acid, polymethylenepolyphenylene ester	inhalation	LC50 - Rat - 490 mg/m³/4h
Methylenediphenyl diisocyanate	inhalation	LC50 - Rat - 369 mg/cu m/4 h
4,4'-Methylenediphenyl diisocyanate	inhalation	LC50 - Rat - 369 mg/cu m/4 h
Xylene	dermal	LD50 - Rat - > 1,700 mg/kg
	inhalation	LC50 - Rat - 5,000 ppm/4 h
1, 2, 4-Trimethylbenzene	inhalation	LC50 - Rat - 18,000 mg/m³

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data:

No data available.

Substance data:

Name	Result
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	Irritating to the skin.
Isocyanic acid, polymethylenepolyphenylene ester	Moderate skin irritation.
Methylenediphenyl diisocyanate	Irritating to the skin.
4,4'-Methylenediphenyl diisocyanate	Irritating to the skin.
Xylene	Irritating to the skin.
1, 2, 4-Trimethylbenzene	Irritating to the skin.
Naphtha (petroleum), hydrotreated heavy	Irritating to the skin.

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data:

No data available.

Substance data:

Name	Result
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	Irritating effect on the eyes.
Isocyanic acid, polymethylenepolyphenylene ester	Irritating effect on the eyes.
Methylenediphenyl diisocyanate	Moderate eye irritation.
4,4'-Methylenediphenyl diisocyanate	Moderate eye irritation.
1, 2, 4-Trimethylbenzene	Irritating effect on the eyes.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction May cause allergy or asthma symptoms or breathing difficulties if inhaled

Product data:

No data available.

Substance data:

Name	Result
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	Sensitization possible through skin and respiratory contact.
Isocyanic acid, polymethylenepolyphenylene ester	May cause sensitization by respiratory contact.
Methylenediphenyl diisocyanate	May cause sensitization by inhalation and skin contact.
4,4'-Methylenediphenyl diisocyanate	May cause sensitization by inhalation and skin contact.
Cumene	No skin irritation
	No eye irritation
Propanol, ((1-methyl-1,2-ethanediyl)bis(oxy))bis-, polymer with 1,1'-methylenebis(4-isocyanatobenzene)	Sensitization possible through respiratory contact.

Carcinogenicity

Assessment: Suspected of causing cancer

Product data: No data available.

Substance data:

Name	Species	Result
Methylenediphenyl diisocyanate	Methylenediphenyl diisocyanate	May cause cancer.
4,4'-Methylenediphenyl diisocyanate		May cause cancer.
Carbon Black	Carbon Black	The IARC carcinogenic classification and California Proposition 65 Warning only apply to airborne, unbound particles of respirable size of Carbon Black.
Solvent naphtha (petroleum), light arom.	Solvent naphtha (petroleum), light arom.	Component may cause cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Isocyanic acid, polymethylenepolyphenylene ester	Group 3 - Not classifiable as to its carcinogenicity to humans
Carbon Black	Group 2B - Possibly carcinogenic to humans
Xylene	Group 3 - Not classifiable as to its carcinogenicity to humans
Cumene	Group 2B - Possibly carcinogenic to humans

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Solvent naphtha (petroleum), light arom.	May cause genetic defects.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause respiratory irritation May cause drowsiness or dizziness

Product data:

No data available.

Substance data:

Name	Result
Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	May cause respiratory tract irritation through single or repeated exposure.
Isocyanic acid, polymethylenepolyphenylene ester	Component affects the respiratory system through single and repeated exposure.
Methylenediphenyl diisocyanate	Component affects the respiratory system through single and repeated exposure.
4,4'-Methylenediphenyl diisocyanate	Component affects the respiratory system through single and repeated exposure.
Cumene	Component affects the respiratory system.
1, 2, 4-Trimethylbenzene	Component affects the respiratory system.
Naphtha (petroleum), hydrotreated heavy	Component affects the central nervous system.

Specific target organ toxicity (repeated exposure)

Assessment: Causes damage to organs through prolonged or repeated exposure

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: May be fatal if swallowed and enters airways

Product data:

No data available.

Substance data:

Name	Result
Solvent naphtha (petroleum), light arom.	May be fatal if swallowed and enters airway.
Naphtha (petroleum), hydrotreated heavy	May be fatal if swallowed and enters airway.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:

No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Cumene	EC50 - Daphnia magna - 1.4 mg/L - 24 h
	LC50 - Pimephales promelas - 6.32 mg/L - 96 h

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Name	Result
1, 2, 4-Trimethylbenzene	LC50 - Pimephales promelas - 7.72 mg/L - 96 h

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	1263
UN proper shipping name	Paint
UN transport hazard class(es)	3 
Packing group	III
Environmental hazards	None
Special precautions for user	None
Passenger air/rail	60L
Cargo aircraft only	220L
Stowage category	A

International Maritime Dangerous Goods (IMDG)

UN number	1263
UN proper shipping name	Paint
UN transport hazard class(es)	3 
Packing group	III
Environmental hazards	None
Special precautions for user	None
EmS number	F-E, S-E
Stowage category	A

Excepted quantities	E1
Limited quantity	5L

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	1263
UN proper shipping name	Paint
UN transport hazard class(es)	3 
Packing group	III
Environmental hazards	None
Special precautions for user	None
ERG code	3L
Excepted quantities	E1
Passenger and cargo	60L
Cargo aircraft only	220L
Limited quantity	10L

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

67815-87-6	Isocyanic acid, polymethylenepolyphenylene ester, polymer with 1,2-ethanediamine, 2-methyloxirane and 1,2-propanediol	Listed
9016-87-9	Isocyanic acid, polymethylenepolyphenylene ester	Listed
26447-40-5	Methylenediphenyl diisocyanate	Listed
101-68-8	4,4'-Methylenediphenyl diisocyanate	Listed
1333-86-4	Carbon Black	Listed
1330-20-7	Xylene	Listed
64742-95-6	Solvent naphtha (petroleum), light arom.	Listed
98-82-8	Cumene	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
52747-01-0	Propanol, ((1-methyl-1,2-ethanediyl)bis(oxy))bis-, polymer with 1,1'-methylenebis(4-isocyanatobenzene)	Listed
64742-48-9	Naphtha (petroleum), hydrotreated heavy	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

9016-87-9	Isocyanic acid, polymethylenepolyphenylene ester	Not Listed
101-68-8	4,4'-Methylenediphenyl diisocyanate	Not Listed
1330-20-7	Xylene	Listed
98-82-8	Cumene	Not Listed

95-63-6	1, 2, 4-Trimethylbenzene	Not Listed

CERCLA:

1330-20-7	Xylene	Listed	100 lb

RCRA:

1330-20-7	Xylene	Listed	U239

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

101-68-8	4,4'-Methylenediphenyl diisocyanate	Listed
1333-86-4	Carbon Black	Listed
1330-20-7	Xylene	Listed
64742-95-6	Solvent naphtha (petroleum), light arom.	Not Listed
98-82-8	Cumene	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
64742-48-9	Naphtha (petroleum), hydrotreated heavy	Not Listed

New Jersey Right to Know:

9016-87-9	Isocyanic acid, polymethylenepolyphenylene ester	Listed
101-68-8	4,4'-Methylenediphenyl diisocyanate	Listed
1333-86-4	Carbon Black	Listed
1330-20-7	Xylene	Listed
64742-95-6	Solvent naphtha (petroleum), light arom.	Not Listed
98-82-8	Cumene	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
64742-48-9	Naphtha (petroleum), hydrotreated heavy	Not Listed

New York Right to Know:

101-68-8	4,4'-Methylenediphenyl diisocyanate	Listed
1333-86-4	Carbon Black	Not Listed
1330-20-7	Xylene	Listed
64742-95-6	Solvent naphtha (petroleum), light arom.	Not Listed
98-82-8	Cumene	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed
64742-48-9	Naphtha (petroleum), hydrotreated heavy	Not Listed

Pennsylvania Right to Know:

101-68-8	4,4'-Methylenediphenyl diisocyanate	Listed
1333-86-4	Carbon Black	Listed
1330-20-7	Xylene	Listed
98-82-8	Cumene	Listed
95-63-6	1, 2, 4-Trimethylbenzene	Listed

California Proposition 65:

⚠**WARNING**: This product can expose you to chemicals including Bounded Carbon Black and Cumene which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-2-0

HMIS: 3-2-0

Initial preparation date: 04.06.2018

End of Safety Data Sheet

Cleaner Degreaser

SECTION 1: Identification

Product identifier

Product name: Cleaner Degreaser
Product code: 40101, 40104, 40105, 40116, 40155, 240101, 240104, 240105, 240116, 240155

Recommended use of the product and restriction on use

Relevant identified uses: Cleaner, Degreaser
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:
United States
P.O.R. Products
38 Portman Road
New Rochelle, NY 10801
914-636-0700

Emergency telephone number:

United States
ChemTel Inc.
+1 800 255 3924
+1 813 248 0585

SECTION 2: Hazard(s) identification

GHS classification:

Corrosive to metals, category 1
Skin corrosion, category 1A
Carcinogenicity, category 2
Specific target organ toxicity - single exposure, category 2

Label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H351 Suspected of causing cancer.
H371 May cause damage to organs (respiratory system) if inhaled as a mist.

Precautionary statements:

P234 Keep only in original container.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash hands and skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P270 Do not eat, drink or smoke when using this product.
P390 Absorb spillage to prevent material damage
P310 Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see first aid instructions on this label).
P363 Wash contaminated clothing before reuse
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P406 Store in a corrosive resistant container with a resistant inner liner.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 111-76-2	2-Butoxyethanol	1-3
CAS number: 1310-58-3	Potassium hydroxide	2-5
CAS number: 68439-45-2	Alcohols, C6-12, ethoxylated, liquids	1-3

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position
Maintain an unobstructed airway
Get medical advice/attention if you feel unwell
Take precautions to ensure your own safety
Remove source of exposure or move person to fresh air and keep comfortable for breathing
Immediately call a POISON CONTROL CENTER or seek medical attention
If breathing has stopped, trained personnel should begin rescue breathing
Avoid mouth-to-mouth contact by using a barrier device
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR)

After skin contact:

Rinse affected area with soap and water
If symptoms develop or persist, seek medical attention
Avoid direct contact and wear chemical protective clothing, if necessary

Immediately take off all contaminated clothing
Gently blot or brush away excess product
Rinse skin with lukewarm, gently flowing water until medical aid is available
Immediately call a POISON CONTROL CENTER or seek medical attention
Wash contaminated clothing before re-use or discard

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes
If symptoms develop or persist, seek medical attention
Avoid direct contact and wear chemical protective gloves, if necessary
Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open
Remove contact lenses, if present and easy to do so
Continue rinsing until medical aid is available
Immediately call a POISON CONTROL CENTER or seek medical attention

After swallowing:

Rinse mouth thoroughly
Seek medical attention if irritation, discomfort, or vomiting persists
Immediately call a POISON CONTROL CENTER or seek medical attention
Do not induce vomiting and rinse mouth
If vomiting occurs naturally, lie on your side, in the recovery position
If breathing has stopped, trained personnel should begin rescue breathing
Avoid mouth-to-mouth contact by using a barrier device
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR)

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Treat symptomatically

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors
May form corrosive mixtures with water

Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Not determined or not applicable.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation
Ensure air handling systems are operational
Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment
Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing
Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders)
Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.
Protect from freezing and physical damage.
Store in a cool, well-ventilated area.
Store in corrosive resistant container with a resistant inner lining.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Potassium hydroxide	1310-58-3	ACGIH TLV C 2.0 mg/m³
	2-Butoxyethanol	111-76-2	ACGIH TLV TWA: 20 ppm
NIOSH	Potassium hydroxide	1310-58-3	NIOSH REL C 2.0 mg/m³
	2-Butoxyethanol	111-76-2	NIOSH REL TWA 5 ppm (24 mg/m³)
United States (OSHA)	2-Butoxyethanol	111-76-2	OSHA PEL TWA 50 ppm (240 mg/m³)
Australia	2-Butoxyethanol	111-76-2	TWA: 96.9 mg/m³ (20 ppm) ; STEL: 242 mg/m³ (50 ppm)
	Potassium hydroxide	1310-58-3	Peak Limitation: 2 mg/m³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

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.

General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Clear Colorless Liquid
Odor	Very Mild
Odor threshold	Not determined or not available.
pH	9.5 - 13.1
Melting point/freezing point	Melting: Approximately 0°C (32°F); Freezing: Approximately 100°C (212°F)
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	No Flash Point
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	23 hPa @ 20°C
Vapor density	Not determined or not available.
Density	1.03 g/mL
Relative density	Not determined or not available.
Solubilities	Miscible in water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	1 mm2/s @ 20°C
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.

Cleaner Degreaser

Oxidizing properties	Not determined or not available.

Other information

Recommended Storage Temperature	40°F - 90°F
Recommended Shelf Life	Unopened, 3 Years
VOC Content	20.9 g/L; 2.04% w/w

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

Strong acids (e.g. hydrochloric acid), strong bases (e.g. sodium hydroxide), strong oxidizing agents (e.g. perchloric acid).

Corrosive to: aluminum alloys, copper alloys (e.g. brass and/or bronze), zinc.

Hazardous decomposition products:

Corrosive chemicals; irritating chemicals; toxic chemicals.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Route	Result
Potassium hydroxide	oral	LD50 - Rat - 333 mg/kg
Alcohols, C6-12, ethoxylated, liquids	oral	LD50 > 300 to <= 2,000 mg/kg
2-Butoxyethanol	oral	LD50 - Rat - 470 mg/kg
	dermal	LD50 - Rabbit - 220 mg/kg
	inhalation	LC50 - Rat - 450 ppm - 4H

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data:

No data available.

Substance data:

Name	Result
Potassium hydroxide	Corrosive to the skin.
2-Butoxyethanol	Irritating to the skin.

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data:

Name	Result
Alcohols, C6-12, ethoxylated, liquids	Corrosive effect on the eyes.
2-Butoxyethanol	Irritating effect on the eyes.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Suspected of causing cancer

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: May cause damage to organs

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

Other information:
No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity
Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

Chronic (long-term) toxicity
Product data: No data available.
Substance data: No data available.

Persistence and degradability
Product data: No data available.
Substance data: No data available.

Bioaccumulative potential
Product data: No data available.
Substance data: No data available.

Mobility in soil
Product data: No data available.
Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:
It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	1814
UN proper shipping name	POTASSIUM HYDROXIDE, SOLUTION
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	None
Special precautions for user	None
Passenger air/rail	1L
Cargo aircraft only	30L
Stowage category	A

International Maritime Dangerous Goods (IMDG)

UN number	1814
UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION

Cleaner Degreaser

UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	None
Special precautions for user	None
EmS number	F-A, S-B
Stowage category	A
Excepted quantities	E1
Limited quantity	5L

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	1814
UN proper shipping name	POTASSIUM HYDROXIDE SOLUTION
UN transport hazard class(es)	8 
Packing group	III
Environmental hazards	None
Special precautions for user	None
ERG code	8L
Excepted quantities	E1
Passenger and cargo	5L
Cargo aircraft only	60L
Limited quantity	1L

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

1310-58-3	Potassium hydroxide	Listed
68439-45-2	Alcohols, C6-12, ethoxylated, liquids	Listed
111-76-2	2-Butoxyethanol	Listed

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals: Not determined.

CERCLA:

1310-58-3	Potassium hydroxide	Listed	1,000 lb

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

1310-58-3	Potassium hydroxide	Listed
111-76-2	2-Butoxyethanol	Listed

New Jersey Right to Know:

Cleaner Degreaser

1310-58-3	Potassium hydroxide	Listed
111-76-2	2-Butoxyethanol	Listed

New York Right to Know:

1310-58-3	Potassium hydroxide	Listed
111-76-2	2-Butoxyethanol	Listed

Pennsylvania Right to Know:

1310-58-3	Potassium hydroxide	Listed
111-76-2	2-Butoxyethanol	Listed

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-4

HMIS: 3-0-4

Initial preparation date: 03.23.2018

Additional information:

Version 1.1

End of Safety Data Sheet

Safety Data Sheet

acc. to 29 CFR 1910.1200 App D

POR-15 METAL PREP

Version number: GHS 2.0
Replaces version of: 2022-03-28 (GHS 1)

Revision: 2022-10-24

SECTION 1: Identification

1.1 Product identifier

Trade name	**POR-15 METAL PREP**
Product code(s)	40201, 40204, 40216, 40255

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

Relevant identified uses	General use
Uses advised against	Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin.

1.3 Details of the supplier of the safety data sheet

P.O.R. Products
38 Portman Road
New Rochelle NY 10801
United States

Telephone: +1 914-636-0700
e-mail: support@porproducts.com
Website: www.porproducts.com

e-mail (competent person)	support@porproducts.com

1.4 Emergency telephone number

Emergency information service	1-800-255-3924 ChemTel Inc.

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Section	Hazard class	Category	Hazard class and category	Hazard statement
A.2	skin corrosion/irritation	1	Skin Corr. 1	H314
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word danger

- Pictograms

GHS05

- Hazard statements

H314	Causes severe skin burns and eye damage.

- Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dusts or mists.
P280	Wear eye protection/face protection.
P301+P330+P331	If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340	If inhaled: Remove person to fresh air and keep comfortable for breathing.
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 on this label).
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501	Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling phosphoric acid ... %

2.3 Other hazards

of no significance

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS
phosphoric acid ... %	CAS No 7664-38-2	10 – < 25	Skin Corr. 1B / H314 Eye Dam. 1 / H318

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Phosphorus oxides (PxOy)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas. Never add water to this product.

- Handling of incompatible substances or mixtures

Do not mix with alkali.

- Keep away from

Caustic solutions

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as

frost

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling-C [ppm]	Ceiling-C [mg/m³]	Notation	Source
US	phosphoric acid	7664-38-2	PEL (CA)		1		3				Cal/OSHA PEL
US	phosphoric acid	7664-38-2	REL		1 (10 h)		3				NIOSH REL
US	phosphoric acid	7664-38-2	TLV®		1		3				ACGIH® 2022
US	phosphoric acid	7664-38-2	PEL		1						29 CFR 1910.1000

Notation

Ceiling-C	ceiling value is a limit value above which exposure should not occur
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	not determined
Particle	not relevant (liquid)
Odor	characteristic

Other safety parameters

pH (value)	0.5 – 1 (acid)
Melting point/freezing point	not determined
Initial boiling point and boiling range	100 °C
Flash point	not determined
Evaporation rate	Not determined
Flammability (solid, gas)	not relevant, (fluid)
Vapor pressure	not determined
Density	10.22 $^{lb}/_{gal}$
Vapor density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion

Partition coefficient

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidizing properties	none

9.2 Other information

Solid content	17 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is not available.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

DOT	UN 3264
IMDG-Code	UN 3264
ICAO-TI	UN 3264

14.2 UN proper shipping name

DOT	Corrosive liquid, acidic, inorganic, n.o.s.
IMDG-Code	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
ICAO-TI	Corrosive liquid, acidic, inorganic, n.o.s.
Technical name (hazardous ingredients)	phosphoric acid ... %

14.3 Transport hazard class(es)

DOT	8
IMDG-Code	8
ICAO-TI	8

14.4 Packing group

DOT	II
IMDG-Code	II
ICAO-TI	II

14.5 Environmental hazards

hazardous to the aquatic environment

Environmentally hazardous substance (aquatic environment): trizinc bis(orthophosphate)

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Particulars in the shipper's declaration	UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (contains: phosphoric acid ... %), 8, II, environmentally hazardous
Reportable quantity (RQ)	41,667 lbs (18,917 kg) (phosphoric acid ... %)
Danger label(s)	8, fish and tree

Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	386, B2, IB2, T11, TP2, TP27
ERG No	154

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	yes (hazardous to the aquatic environment) (trizinc bis(orthophosphate))
Danger label(s)	8, fish and tree

Special provisions (SP)	274
Excepted quantities (EQ)	E2
Limited quantities (LQ)	1 L
EmS	F-A, S-B
Stowage category	B
Segregation group	1 - Acids

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	8

Special provisions (SP)	A3
Excepted quantities (EQ)	E2
Limited quantities (LQ)	0,5 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	CAS No	Remarks	Statutory code	Final RQ pounds (Kg)
phosphoric acid ... %	7664-38-2		1	5000 (2270)

Legend
1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of substance	CAS No	Functionality	Authoritative Lists
phosphoric acid ... %	7664-38-2		OEHHA RELs

- Toxic or Hazardous Substance List (MA-TURA)

Name of substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concentration Threshold
phosphoric acid ... %	7664-38-2				1.0 %

- Hazardous Substances List (MN-ERTK)

Name of substance	CAS No	References	Remarks
phosphoric acid ... %	7664-38-2	A, O	

Legend
A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH
O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

- Hazardous Substance List (NJ-RTK)

Name of substance	CAS No	Remarks	Classifications
phosphoric acid ... %	7664-38-2		CO

Legend
CO Corrosive

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
PHOSPHORIC ACID	7664-38-2	E

Legend
E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of substance	CAS No	References
phosphoric acid ... %	7664-38-2	T, F

Legend
F Flammability (NFPA®)
T Toxicity (ACGIH®)

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description
Chronic	/	none
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	0	material that will not burn under typical fire conditions
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	0	material that will not burn under typical fire conditions
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National inventories

Country	Inventory	Status
US	TSCA	all ingredients are listed

Legend
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.