

EQUIPMENT DESCALER

Safety Data Sheet

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

Date of issue: 08/06/2013

Revision date: 05/02/2015

Supersedes: 08/03/2013



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

1.1. Product identifier

Product form : Mixture
Product name : EQUIPMENT DESCALER
Product code : EQU

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

Use of the substance/mixture : Industrial and Institutional Equipment Descaler

1.3. Details of the supplier of the safety data sheet

Sky Blue Industries, Inc.
760 W. Exchange Road
Ogden, Utah 84401 - USA
T (800) 998-2808

1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Met. Corr. 1 H290

Skin Corr. 1A H314

Full text of H-statements: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

May be corrosive to metals
Causes severe skin burns and eye damage

Precautionary statements (GHS-US)

Prevention

: Keep only in original container.
Do not breathe fume, gas, mist, spray, vapours.
Wash hands and exposed skin thoroughly after handling.
Wear eye protection, face protection, protective clothing, protective gloves.

Response

: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER, a doctor.
Wash contaminated clothing before reuse.
Absorb spillage to prevent material damage.

Storage

: Store locked up.
Store in corrosive resistant container with a resistant inner liner.

Disposal

: Dispose of contents/container in accordance with local/state/federal regulations.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

EQUIPMENT DESCALER

Safety Data Sheet

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Phosphoric acid	(CAS No) 7664-38-2	70 - 90	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Call a physician immediately.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

- Symptoms/injuries after skin contact : Burns.
- Symptoms/injuries after eye contact : Serious damage to eyes.
- Symptoms/injuries after ingestion : Burns.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : All extinguishing media allowed. Adapt extinguishing media to the environment.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Non combustible.
- Reactivity : Reacts slowly with (some) metals: release of highly flammable gases/vapours (hydrogen).
Reacts violently with (some) acids.

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with skin and eyes. Do not breathe fume, gas, mist, spray, vapours.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. See Section 12 for additional Ecological information.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Store away from other materials. Neutralize spill with quicklime or soda ash. Clean contaminated surfaces with an excess of water.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

EQUIPMENT DESCALER

Safety Data Sheet

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe fume, gas, mist, spray, vapours. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Store in a well-ventilated place. Keep cool.
- Incompatible products : Bases. Strong oxidizing agents. Strong reducing agents.
- Incompatible materials : Metals.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Phosphoric acid (7664-38-2)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr
OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Protective gloves.
- Eye protection : Safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
- Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Clear, green liquid.
- Colour : Green
- Odour : Characteristic, Acidic
- Odour threshold : No data available
- pH : < 1
- pH solution : 1 %
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Flammability (solid, gas) : No data available
- Explosive limits : No data available
- Explosive properties : No data available
- Oxidising properties : No data available
- Vapour pressure : No data available
- Relative density : 1.56
- Relative vapour density at 20 °C : No data available
- Density : 12.98 lb/gal
- Solubility : Soluble in water.

EQUIPMENT DESCALER

Safety Data Sheet

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

Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

VOC content : 0.1 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts slowly with (some) metals: release of highly flammable gases/vapours (hydrogen). Reacts violently with (some) acids.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Contact with reactive metals such as aluminum will generate hydrogen gas. Contact with strong caustic materials will generate heat.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Bases. Strong oxidizing agents. Strong reducing agents. Metals.

10.6. Hazardous decomposition products

Thermal decomposition generates: Oxides of product. Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Phosphoric acid (7664-38-2)	
LD50 oral rat	1530 mg/kg (85 % aqueous solution; Rat; Equivalent or similar to OECD 423; Literature study; 2600 mg/kg bodyweight; 80 % aqueous solution; Rat; Experimental value; 3500 mg/kg bodyweight; 75 % aqueous solution; Rat; Experimental value; 4200 mg/kg bodyweight; Rat; Experimental value; 4400 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	2740 mg/kg bodyweight (85 % aqueous solution; Rabbit; Experimental value; >1260 mg/kg bodyweight; 80 % aqueous solution; Rabbit; Experimental value; >3160 mg/kg bodyweight; 75 % aqueous solution; Rabbit; Experimental value; >3160 mg/kg bodyweight; Rabbit; Experimental value)
ATE US (oral)	1530 mg/kg bodyweight
ATE US (dermal)	2740 mg/kg bodyweight

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: < 1

Serious eye damage/irritation : Not classified

pH: < 1

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns.

EQUIPMENT DESCALER

Safety Data Sheet

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

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

Phosphoric acid (7664-38-2)	
LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	100-1000,96 h; Protozoa; Pure substance
EC50 Daphnia 1	> 100 mg/l (48 h; Daphnia magna; Pure substance)
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)
LC50 other aquatic organisms 2	240 mg/l (96 h; Pure substance)
TLM fish 1	138 ppm (96 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	100-1000,96 h; Protozoa; Pure substance
Threshold limit other aquatic organisms 2	240 mg/l (96 h; Pure substance)
Threshold limit algae 1	> 100 mg/l (72 h; Desmodesmus subspicatus; Pure substance)
Threshold limit algae 2	100 mg/l (72 h; Desmodesmus subspicatus; Pure substance)

12.2. Persistence and degradability

Phosphoric acid (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable

12.3. Bioaccumulative potential

Phosphoric acid (7664-38-2)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/state/federal regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT:

Transport document description : UN3264 Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid), 8, III

UN-No.(DOT) : UN3264

Proper Shipping Name (DOT) : Corrosive liquid, acidic, inorganic, n.o.s.
Phosphoric acid

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : G - Identifies PSN requiring a technical name

EQUIPMENT DESCALER

Safety Data Sheet

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

DOT Special Provisions (49 CFR 172.102)	: IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Isopropyl alcohol	CAS No 67-63-0	< 0.1
-------------------	----------------	-------

Phosphoric acid (7664-38-2)

Not listed on the United States SARA Section 313

RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
--	---------

Isopropyl alcohol (67-63-0)

Listed on United States SARA Section 313

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

No additional information available

EQUIPMENT DESCALER

Safety Data Sheet

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

15.3. US State regulations

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

Phosphoric acid (7664-38-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Isopropyl alcohol (67-63-0)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Indication of changes : Formatting change.

Revision date : 05/02/2015

Full text of H-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage

SDS US (GHS HazCom 2012) - Custom

The information provided on this document is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.