

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name	Phosphoric ester of 2-hydroxyethyl methacrylate
Trade name	Naxonac HP 1000
CAS No.	52628-03-2

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

Identified use(s)	Surfactant
Uses advised against	None

Details of the supplier of the safety data sheet

Company Identification	Nease Co. LLC 10740 Paddys Run Road Harrison, OH 45030
Telephone	(513) 738-1255
Telephone (Product Information)	(888) 762-7373
Fax	(513) 587-2828
E-Mail (competent person)	techservice@neaseco.com

Emergency telephone number

Emergency Phone No.	(513) 738-1255 CHEMTREC 24 hr. (800) 424-9300
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****FOR RESEARCH AND DEVELOPMENT PURPOSES ONLY****

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)	Skin Corr. 1B; Eye Dam. 1; Acute Tox, oral 4; Sensitization, skin 1
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Label elements

Hazard Symbol



Signal Word(s)

DANGER

Hazard Statement(s)

Harmful if swallowed
Causes severe skin burns and eye damage.
May cause an allergic skin reaction
Causes serious eye damage.
May cause respiratory irritation
Do not breathe dust/fume/gas/mist/vapors/spray.
Do not eat, drink, or smoke when using this product.
Use only outdoors or in well-ventillated area.
Contaminated work clothing must not be allowed out of workplace.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Seek medical treatment.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation (redness, rash, blistering) develops, get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER. Get immediate medical attention.

Precautionary Statement(s)

Other hazards

Not classified as PBT or vPvB.

Additional Information

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredient(s)	%W/W	CAS No.	Hazard statement(s)
Phosphoric ester of 2-hydroxyethyl methacrylate	80-90%	52628-03-2	
Orthophosphoric acid	<3%	7664-38-2	
2-hydroxyethyl methacrylate	<3%	868-77-9	

Additional Information - None

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If symptoms occur obtain medical attention.

Skin Contact

Wash affected skin with plenty of water. Remove contaminated clothing immediately. If irritation (redness, rash, blistering) develops, get medical attention. Chemical burns must be treated by physician. Wash contaminated clothing before reuse.

Eye Contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. immediately

Ingestion

Rinse mouth. Do NOT induce vomiting. Seek medical treatment.

Most important symptoms and effects, both acute and delayed

Burning pain and severe corrosive skin damage Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanant eye damage including blindness could result. May cause respiratory irritation

Indication of any immediate medical attention and special treatment needed

Provide general support measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call and ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

-Suitable Extinguishing Media

Extinguish with waterspray, dry chemical, sand or carbon dioxide. Water spray should be used to cool containers.

-Unsuitable Extinguishing Media

Do NOT use water jet.

Special hazards arising from the substance or mixture

Gases hazardous to health may be formed.

Advice for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Avoid inhalation of vapours.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Put on protective equipment before entering danger area.
Environmental precautions	Do not allow to enter drains, sewers or watercourses.
Methods and material for containment and cleaning up	Contain spillages with sand, earth or any suitable adsorbent material. Transfer to a container for disposal or recovery. Do not use metal containers for spilled liquid. Wash the spillage area with water. If possible prevent water running into sewers.
Reference to other sections	For disposal see section 13 of SDS
Additional Information	None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Keep container closed when not in use. Empty containers may contain residues. Do not use metal containers for storage as the phosphoric acid will react with the metal to liberate flammable hydrogen gas Do not get in eyes, on skin, or on clothing.
Conditions for safe storage, including any incompatibilities	
-Storage Temperature	This product should be stored at a temperature greater than: 20°C (68°F).
-Incompatible materials	Attacks many materials and clothing. Keep away from oxidising agents. Keep container tightly closed and dry.
Specific end use(s)	Surfactant

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)		STEL (ppm)		Note:
		PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	
Orthophosphoric acid	7664-38-2	1 mg/m ³	1 mg/m ³ ⁽¹⁾	3 mg/m ³	3 mg/m ³	—

Recommended monitoring method NIOSH 7908 (Non-Volatile Acids)

Exposure controls

Appropriate engineering controls Local exhaust required.

Personal protection equipment

Eye/face protection



The following to be used as necessary: Goggles giving complete protection to eyes. Full face shield.

Skin protection (Hand protection/ Other)



The following to be used as necessary: Gloves (Neoprene or Natural rubber). Chemical protection suit. Wear safety or chemical resistant shoes or boots. Check with protective equipment manufacturer's data.

Respiratory protection



No personal respiratory protective equipment normally required.

Thermal hazards

Use gloves with insulation for thermal protection, when needed.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Colour	Clear / Yellow
Odour	Acrylic
Odour Threshold (ppm)	Not available.
pH (Value)	Not available
Melting Point (°C) / Freezing Point (°C)	> 40°F (>4.44°C)
Boiling point/boiling range (°C):	>212°F (>100°C)
Flash Point (°C)	>100 (212 °F)
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Explosive limit ranges	Not available.
Vapour Pressure (Pascal)	<0.0000001 kPa @ 25°C.
Vapour Density (Air=1)	Not available.
Density (g/ml)	>1.1 @ 25°C
Solubility (Water)	Dispersible.
Solubility (Other)	Not available.
Partition Coefficient (n-Octanol/water)	Not available.
Auto Ignition Temperature (°C)	Not available.
Decomposition Temperature (°C)	Not available.
Kinematic Viscosity (cSt) @ 40°C	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not available

Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None anticipated.
Conditions to avoid	Incompatible materials.
Incompatible materials	Reacts with -oxidizers, acids, and bases
Hazardous Decomposition Product(s)	Carbon monoxide, Carbon dioxide, phosphorous compounds

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Substances in preparations / mixtures
Phosphoric ester of 2-hydroxyethyl methacrylate (CAS No. 52628-03-2) (By analogy with similar materials)

Acute toxicity	Oral: LD50 510 mg/kg-bw
Irritation/Corrosivity	Causes serious eye damage. Causes skin burns/damage.
Sensitization	May cause allergic skin reaction
Repeated dose toxicity	No information available
Carcinogenicity	No information available

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity

No information available

Toxicity for reproduction

No information available

Orthophosphoric acid (CAS No. 7664-38-2)

Acute toxicity	Oral: LD50 = 2600 mg/kg-bw Inhalation: LC50 (1 hour) = 3846 mg/m ³ (rabbit; mice; guinea pigs)
Irritation/Corrosivity	Corrosive (Skin and Eyes)
Sensitization	Not available.
Repeated dose toxicity	NOAEL (42-54 days) <250 mg/kg (rat)
Carcinogenicity	No information available

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity There is no evidence of mutagenic potential.
Toxicity for reproduction NOAEL = 500 mg/kg (rat)

2-hydroxyethyl methacrylate (CAS No. 868-77-9)

Acute toxicity	Oral: LD50 = 2600 mg/kg-bw Inhalation: LC50 (1 hour) = 3846 mg/m ³ (rabbit; mice; guinea pigs)
Irritation/Corrosivity	Corrosive (Skin and Eyes)
Sensitization	Not available.
Repeated dose toxicity	NOAEL (42-54 days) <250 mg/kg (rat)
Carcinogenicity	No information available

NTP	IARC	ACGIH	OSHA	NIOSH
No.	No.	No.	No.	No.

Mutagenicity There is no evidence of mutagenic potential.
Toxicity for reproduction Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity - Substances in preparations / mixtures

Phosphoric ester of 2-hydroxyethyl methacrylate (CAS No. 52628-03-2) (By analogy with similar materials)

Short term	LC50 (96 hour): 22000 mg/L (<i>fish</i>)
Long Term	No data.
Persistence and degradability	No data.
Bioaccumulative potential	No data.
Mobility in soil	No data.
Results of PBT and vPvB assessment	Not available.
Other adverse effects	None known.

2-hydroxyethyl methacrylate (CAS No. 868-77-9) (By analogy with similar materials)

Short term	LC50 (96 hour): 213-242 mg/L (<i>Pimephales promelas</i>)
Long Term	No data.
Persistence and degradability	No data.
Bioaccumulative potential	No data.
Mobility in soil	NPartition coefficient N-octanol/water (log Kow) : 0.47
Results of PBT and vPvB assessment	Not available.
Other adverse effects	None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Additional Information None known.

SECTION 14: TRANSPORT INFORMATION

	Land transport (U.S. DOT)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN number	3265	3265	3265
Proper Shipping Name	Corrosive Liquid, Acidic, Organic, N.O.S (Phosphoric acid ester, Phosphoric acid)	Corrosive Liquid, Acidic, Organic, N.O.S (Phosphoric acid ester, Phosphoric acid)	Corrosive Liquid, Acidic, Organic, N.O.S (Phosphoric acid ester, Phosphoric acid)
Transport hazard class(es)	8	8	8
Packing group	II	II	II
Hazard label(s)	Corrosive	Corrosive	Corrosive
Environmental hazards	No	No	No
Special precautions for user	None known.	None known.	None known.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not established.

SECTION 15: REGULATORY INFORMATION

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

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Canada Domestic Substance List (DSL) - Listed

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
Orthophosphoric acid	<5%	7664-38-2	5000

SARA 311/312 - Hazard Categories:

Fire Sudden Release Reactivity Immediate (acute) Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
None	-----	----

SARA 302 - Extremely Hazardous Substances(40 CFR 355):

Chemical Name	CAS No.	Typical %wt.
None	-----	-----

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: March 11, 2015

Additional Information:



HMIS (Hazardous Material Information System)



NFPA (National Fire Protection Association)

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