

Synthetic Labs professional grade detergents & solutions Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Supersedes: 03/16/2017 Supersedes: 03/14/2017 Date of issue: 03/09/2017 Revision date: 03/16/2017 Supersedes: 03/14/2017 Version: 2.1

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Trade name	: Formula 45
Product code	: 0359
1.2. Recommended use and restrictions	s on use
Recommended use	: Surface cleaning
1.3. Supplier	
Synthetic Labs 24 Victory Lane Dracut, MA 01826 - United States T 800.255.4050 - F 978.957.5122 www.syntecpro.com	
1.4. Emergency telephone number	
Emergency number	: Infotrac 24 Hour Medical Emergency Number: 1-800-535-5053
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or r	nixture
GHS US classification	
Serious eye damage/eye irritation Category 1	Causes serious eye damage
2.2. GHS Label elements, including pre-	cautionary statements
GHS US labeling	
Hazard pictograms (GHS US)	
Signal word (GHS US)	: Danger
Hazard statements (GHS US)	: Causes serious eye damage
Precautionary statements (GHS US)	: Wear protective gloves/protective clothing/eye protection/face protection. 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 or doctor.
2.3. Other hazards which do not result	n classification
No additional information available	

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

Substances 3.1.

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	GHS US classification
Dipropylene Glycol Monoethyl Ether	(CAS-No.) 34590-94-8	1 – 5	Flam. Liq. 4, H227
Disodium Metasilicate	(CAS-No.) 6834-92-0	1 – 5	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1, H314 Eye Dam. 1, H318 STOT SE 3, H335

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Full text of hazard classes and H-statements : see section 16

Full text of hazard classes and H-statements : s	
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 effe	cts (acute and delayed)
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.
4.3. Immediate medical attention and s	nocial treatment if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguis	hing media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the c	
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Special protective equipment and p	precautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	Isures
6.1. Personal precautions, protective e	quipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
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.	
6.3. Methods and material for containm	ent and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material.
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.	
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 dust/fume/gas/mist/vapours/spray. 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, includ	ing any incompatibilities
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Formula 45		
No additional information available		
Disodium Metasilicate (6834-92-0)		
No additional information available		
Dipropylene Glycol Monoethyl Ether (34590-94-8)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH TWA (ppm)	100 ppm	
ACGIH STEL (ppm)	150 ppm	
USA - OSHA - Occupational Exposure Limits		
Local name	Dipropylene glycol methyl ether	
OSHA PEL (TWA) (mg/m³)	600 mg/m³	
OSHA PEL (TWA) (ppm)	100 ppm	

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

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

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and c	hemical properties
Physical state	: Liquid
Appearance	: Liquid.
Color	: clear
Odor	: odorless
Odor threshold	: No data available
рН	: 12.5
pH solution	: 11 – 12
Melting point	: Not applicable
Freezing point	: 32 °F
Boiling point	: No data available
Flash point	: > 300 °F

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Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.03 g/m³
Molecular mass	: 1.03 g/mol
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

No additional information available
SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

ECTION 11: Toxicological informatio	n
.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Disodium Metasilicate (6834-92-0)	
LD50 oral rat	1152 – 1349 mg/kg body weight (Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 5000 mg/kg body weight (EPA OPPTS 870.1200: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 2.06 mg/l (EPA OPPTS 870.1300: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
Dipropylene Glycol Monoethyl Ether (34590-	94-8)
LD50 oral rat	> 5000 mg/kg (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	9510 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimenta value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 1.67 mg/l air (Equivalent or similar to OECD 403, 7 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

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Skin corrosion/irritation	: Not classified.
	pH: 12.5
Serious eye damage/irritation	: Causes serious eye damage.
	pH: 12.5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Creatin terrat error terrisity single error	Not slope ford
Specific target organ toxicity – single exposure	: Not classified

Disodium Metasilicate (6834-92-0)	
Specific target organ toxicity – single exposure	May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	Not classified
	: Not classified : No data available
Symptoms/effects after eye contact	 Burns. Serious damage to eyes. Burns.

SECTION 12: Ecological information		
12.1.	Toxicity	

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Disodium Metasilicate (6834-92-0)	
LC50 fish 1	210 mg/l (ISO 7346-1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value)
EC50 Daphnia 1	1700 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
Dipropylene Glycol Monoethyl Ether (34590-	94-8)
LC50 fish 1	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Poecilia reticulata, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	> 969 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Disodium Metasilicate (6834-92-0)	dium Metasilicate (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
Dipropylene Glycol Monoethyl Ether (34590-94-8)		
Persistence and degradability	Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance	
ThOD	2.06 g O ₂ /g substance	
BOD (% of ThOD)	0	

12.3. Bioaccumulative potential

Disodium Metasilicate (6834-92-0)	
Bioaccumulative potential	Bioaccumulation: not applicable.
Dipropylene Glycol Monoethyl Ether (34590-94-8)	
Partition coefficient n-octanol/water (Log Pow)	0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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12.4. Mobility in soil				
Disodium Metasilicate (6834-92-0)	n Metasilicate (6834-92-0)			
Ecology - soil	No (test)data on mobility of the substance available.			
Dipropylene Glycol Monoethyl Ether (34590-94-8)				
Surface tension	68.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)			
Ecology - soil	No (test)data on mobility of the substance available.			

12.5. Other adverse effects

No additional information available

ECTION 13: Disposal considerations	S
.1. Disposal methods	
Vaste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
ECTION 14: Transport information	
Department of Transportation (DOT) n accordance with DOT	
lot applicable	
ransportation of Dangerous Goods	
lot applicable	
ransport by sea	
lot applicable	
Nir transport	
Nir transport Not applicable	
lot applicable	
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Component	State or local regulations
Dipropylene Glycol Monoethyl Ether(34590-94-8)	U.S New Jersey - Right to Know Hazardous Substance List

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SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations		
Revision date	: 03/16/2017	
Hazard Rating		
Health	: 2 Moderate Hazard - Temporary or minor injury may occur	
Flammability	: 0 Minimal Hazard - Materials that will not burn	
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.	

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.