

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/9/2017 Revision date: 3/28/2017 Supersedes: 3/16/2017 Version: 1.2

### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture Trade name Fusion Product code 1051

#### 1.2. Recommended use and restrictions on use

Recommended use : Heavy-duty detergent, Vehicle cleaning/vehicle care product

#### 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 mixture

#### **GHS US classification**

Skin corrosion/irritation Category 1A Serious eye damage/eye irritation Category 1 Causes severe skin burns and eye damage

Causes serious eye damage

### 2.2. GHS Label elements, including precautionary statements

### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) Danger

Hazard statements (GHS US) Causes severe skin burns and eye damage

Causes serious eye damage

Precautionary statements (GHS US) : Do not breathe dust/fume/gas/mist/vapors/spray.

Wash hands, forearms and face thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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 person to fresh air and keep 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 or doctor.

Specific treatment (see supplemental first aid instruction on this label).

Wash contaminated clothing before reuse.

Store locked up.

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Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

No additional information available

#### **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
Sodium hydroxide	CAS-No.: 1310-73-2	5 – 10	Acute Tox. 1 (Oral), H300 Skin Corr. 1, H314 Eye Dam. 1, H318
Tetrasodium ethylenediaminetetraacetate	CAS-No.: 64-02-8	1 – 5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Sodium Silica Salts	CAS-No.: 1344-09-8	1 – 5	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319

Full text of hazard classes and 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 (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 special treatment, if necessary

Treat symptomatically.

### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

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### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Special protective equipment and 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 measures**

#### 6.1. Personal precautions, protective equipment 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/vapors/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 containment 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/vapors/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, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

### Fusion

No additional information available

#### Tetrasodium ethylenediaminetetraacetate (64-02-8)

No additional information available

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Sodium hydroxide (1310-73-2)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Sodium hydroxide	
ACGIH OEL Ceiling	2 mg/m³	
Remark (ACGIH)	URT, eye, & skin irr	
USA - OSHA - Occupational Exposure Limits		
Local name	Sodium hydroxide	
OSHA PEL (TWA) [1]	2 mg/m³	
Sodium Silica Salts (1344-09-8)		
No additional information available		

# 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : 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 chemical properties

Physical state : Liquid
Appearance : Liquid.
Color : Green
Odor : Citrus fruits
Odor threshold : No data available
pH : 14

pH solution : 13.5 – 14

Melting point : Not applicable

Freezing point : No data available

Boiling point : No data available

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Flash point : No data available 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 : 1.04 g/m<sup>3</sup> Density Solubility Soluble in water. Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature No data available : No data available Decomposition temperature : No data available Viscosity, kinematic : No data available Viscosity, dynamic **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties No data available

#### 9.2. Other information

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.

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Tetrasodium ethylenediaminetetraacetate (64-02-8)		
LD50 oral rat	1780 – 2000 mg/kg (Rat, Male / female, Experimental value, Oral)	
ATE US (oral)	1780 mg/kg body weight	

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Sodium hydroxide (1310-73-2)		
ATE US (oral)	1.111 mg/kg body weight	
Sodium Silica Salts (1344-09-8)		
LD50 oral rat	> 2000 mg/kg (Rat, Oral)	
ATE US (dermal)	1100 mg/kg body weight	
Skin corrosion/irritation	: Causes severe skin burns.	
Tetrasodium ethylenediaminetetraacetate	pH: 14	
pH	11 (1 %)	
	11 (1 70)	
Sodium hydroxide (1310-73-2)		
рН	14 (5 %)	
Sodium Silica Salts (1344-09-8)		
рН	≈ 12.9 (11 – 11.4)	
Serious eye damage/irritation	: Causes serious eye damage. pH: 14	
Tetrasodium ethylenediaminetetraacetate	(64-02-8)	
рН	11 (1 %)	
Sodium hydroxide (1310-73-2)		
рН	14 (5 %)	
Sodium Silica Salts (1344-09-8)		
рH	≈ 12.9 (11 – 11.4)	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
Tetrasodium ethylenediaminetetraacetate (64-02-8)		
Viscosity, kinematic	Not applicable (solid)	
Sodium hydroxide (1310-73-2)		
Viscosity, kinematic	No data available in the literature	
Symptoms/effects after skin contact	: Burns.	
Symptoms/effects after eye contact	: Serious damage to eyes.	
Symptoms/effects after ingestion	: Burns.	

# SECTION 12: Ecological information

# 12.1. Toxicity

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

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Tetrasodium ethylenediaminetetraacetate (64-02-8)		
LC50 - Fish [1]	121 mg/l (US EPA, 96 h, Lepomis macrochirus, Static system, Fresh water, Experimental value, Soft water)	
EC50 - Crustacea [1]	625 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)	
ErC50 algae	> 100 mg/l (EU Method C.3, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Weight of evidence, Nominal concentration)	
Sodium hydroxide (1310-73-2)		
LC50 - Fish [1]	189 mg/l (48 h, Leuciscus idus, Fresh water, Experimental value)	
EC50 - Crustacea [1]	40.4 mg/l (48 h, Ceriodaphnia sp., Experimental value, Locomotor effect)	
Sodium Silica Salts (1344-09-8)		
LC50 - Fish [1]	3185 mg/l (96 h, Brachydanio rerio, Pure substance)	
EC50 - Crustacea [1]	216 mg/l (96 h, Daphnia magna, Pure substance)	
EC50 - Crustacea [2]	160 mg/l (96 h, Amphipoda, Pure substance)	

# 12.2. Persistence and degradability

Tetrasodium ethylenediaminetetraacetate (64-02-8)			
Persistence and degradability	Not readily biodegradable in water.		
Biochemical oxygen demand (BOD)	< 0.002 g O <sub>2</sub> /g substance		
Chemical oxygen demand (COD)	$0.54 - 0.58$ g $O_2$ /g substance		
Sodium hydroxide (1310-73-2)	Sodium hydroxide (1310-73-2)		
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
Sodium Silica Salts (1344-09-8)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		

# 12.3. Bioaccumulative potential

Tetrasodium ethylenediaminetetraacetate (64-02-8)		
BCF - Fish [1]	1.1 – 1.8 (28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	-13.17 (Estimated value, KOWWIN)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Sodium hydroxide (1310-73-2)		
Bioaccumulative potential	Not bioaccumulative.	

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Sodium Silica Salts (1344-09-8)	
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

Tetrasodium ethylenediaminetetraacetate (64-02-8)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.495 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Low potential for adsorption in soil.	
Sodium hydroxide (1310-73-2)		
Surface tension	No data available in the literature	
Ecology - soil	No (test)data on mobility of the substance available.	
Sodium Silica Salts (1344-09-8)		
Ecology - soil	No (test)data on mobility of the component(s) available.	

#### 12.5. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# **SECTION 14: Transport information**

#### 14.1. UN number

DOT NA No : UN1760 UN-No. (TDG) : Not applicable UN-No. (IMDG) : 1760 UN-No. (IATA) : 1760

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive liquids, n.o.s.
Proper Shipping Name (TDG) : Not applicable

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, N.O.S. Proper Shipping Name (IATA) : Corrosive liquid, n.o.s.

#### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8



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#### TDG

Transport hazard class(es) (TDG) : Not applicable

#### **IMDG**

Transport hazard class(es) (IMDG) : 8
Hazard labels (IMDG) : 8



#### IATA

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



#### 14.4. Packing group

Packing group (DOT) : II

Packing group (TDG) : Not applicable

Packing group (IMDG) : II
Packing group (IATA) : II

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

#### DOT

UN-No.(DOT) : UN1760

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are

not authorized.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). 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.

T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 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 Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 : 1 L

CFR 173.27)

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DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this

section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters"

**TDG** 

Emergency Response Guide (ERG) Number : 154

IMDG

Special provision (IMDG) : 274

Packing instructions (IMDG) : P001

IBC packing instructions (IMDG) : IBC02

Tank instructions (IMDG) : T11

Tank special provisions (IMDG) : TP2, TP27

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

: 30 L

EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

**IATA** 

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y840 PCA limited quantity max net quantity (IATA) : 0.5L PCA packing instructions (IATA) 851 PCA max net quantity (IATA) 1L CAO packing instructions (IATA) 855 CAO max net quantity (IATA) 30L Special provision (IATA) A3 : 8L ERG code (IATA)

# 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

# **SECTION 15: Regulatory information**

# 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Tetrasodium ethylenediaminetetraacetate	64-02-8	Present	Active	
Sodium hydroxide	1310-73-2	Present	Active	
Sodium Silica Salts	1344-09-8	Present	Active	

# Sodium hydroxide (1310-73-2)

Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ 1000 lb

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#### 15.2. International regulations

#### CANADA

#### **Tetrasodium ethylenediaminetetraacetate (64-02-8)**

Listed on the Canadian DSL (Domestic Substances List)

### Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)

### Sodium Silica Salts (1344-09-8)

Listed on the Canadian DSL (Domestic Substances List)

#### **EU-Regulations**

No additional information available

#### **National regulations**

No additional information available

### 15.3. US State regulations

Component	State or local regulations
Sodium hydroxide(1310-73-2)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

# **SECTION 16: Other information**

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Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

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.

Safety Data Sheet (SDS), USA

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.