BR-100

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: 3/22/2017 Supersedes: 3/14/2017 Version: 2.2

SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Trade name	:	BR-100
Product code	:	2660

1.2. Recommended use and restrictions on use

Recommended use	:	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	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	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.

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
Disodium Metasilicate	CAS-No.: 6834-92-0	15 – 20	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 STOT SE 3, H335
Sodium Tripolyphosphate	CAS-No.: 7758-29-4	10 – 15	Acute Tox. 2 (Inhalation:dust,mist), H330 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Nitrilolriacetic acid, trisodium salt	CAS-No.: 5064-31-3	5 – 10	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Carc. 2, H351
Alcohols, Ehoxylated	CAS-No.: 68439-46-3	5 – 10	Acute Tox. 4 (Oral), H302

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 after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

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.

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.

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 : Mechanically recover the product.
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. Wear personal protective equipment.
Hygiene measures : 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 a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

BR-100
No additional information available

Disodium Metasilicate (6834-92-0)
No additional information available

Sodium Tripolyphosphate (7758-29-4)
No additional information available

Nitrilolriacetic acid, trisodium salt (5064-31-3)
No additional information available

Alcohols, Ehoxylated (68439-46-3)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	1 ppm
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [2]	1 ppm
OSHA PEL (STEL) [2]	5 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL TWA [ppm]	5 ppm
NIOSH REL (Ceiling)	9 mg/m³

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 : Solid
Appearance : Powder.
Color : red

Odor	:	Citrus fruits
Odor threshold	:	No data available
pH	:	No data available
pH solution	:	11.5 – 12.5
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	Not applicable
Solubility	:	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosion limits	:	Not applicable
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

Disodium Metasilicate (6834-92-0)	
LD50 oral rat	1152 – 1349 mg/kg body weight (Rat, Male / female, Experimental value, Oral, 7 day(s))
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	> 2.06 mg/l (EPA OPPTS 870.1300: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	1152 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

Sodium Tripolyphosphate (7758-29-4)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 4640 mg/kg body weight (24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 0.39 mg/l (EPA OPP 81-3: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))
ATE US (dust, mist)	0.05 mg/l/4h

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
LD50 oral rat	1740 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg body weight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 5 mg/l (4 h, Rat, Male, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (oral)	1740 mg/kg body weight

Alcohols, Ehoxylated (68439-46-3)	
LD50 oral rat	1378 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Dermal)
ATE US (oral)	1378 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns.

Disodium Metasilicate (6834-92-0)	
pH	No data available in the literature

Sodium Tripolyphosphate (7758-29-4)	
pH	9.7 – 9.9 (1 %)

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
pH	11 (1 %)

Serious eye damage/irritation : Causes serious eye damage.

Disodium Metasilicate (6834-92-0)	
pH	No data available in the literature

Sodium Tripolyphosphate (7758-29-4)	
pH	9.7 – 9.9 (1 %)

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
pH	11 (1 %)

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified.
Reproductive toxicity : Not classified
STOT-single exposure : Not classified

Disodium Metasilicate (6834-92-0)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : Not applicable

Disodium Metasilicate (6834-92-0)	
Viscosity, kinematic	Not applicable (solid)

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
Viscosity, kinematic	Not applicable (solid)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

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 - Crustacea [1]	1700 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

Sodium Tripolyphosphate (7758-29-4)	
LC50 - Fish [1]	> 1850 mg/l (AFNOR, 24 h, Danio rerio, Fresh water, Experimental value)
EC50 - Crustacea [1]	> 100 mg/l (EPA OTS 797.1930, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 algae	160 mg/l (ISO 8692, 4 day(s), Desmodesmus subspicatus, Fresh water, Experimental value)

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
LC50 - Fish [1]	114 mg/l (APHA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	98 mg/l (96 h, Gammarus sp., Flow-through system, Fresh water, Experimental value)
ErC50 algae	> 91.5 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

Disodium Metasilicate (6834-92-0)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)

Disodium Metasilicate (6834-92-0)	
ThOD	Not applicable (inorganic)

Sodium Tripolyphosphate (7758-29-4)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Chemical oxygen demand (COD)	0.625 g O_2/g substance

Alcohols, Ehoxylated (68439-46-3)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

Disodium Metasilicate (6834-92-0)	
Bioaccumulative potential	Not bioaccumulative.

Sodium Tripolyphosphate (7758-29-4)	
Bioaccumulative potential	Not bioaccumulative.

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
BCF - Fish [1]	1 – 3 (96 h, Brachydanio rerio, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-13.2 – -2.62 (Calculated, 25 °C)
Bioaccumulative potential	Not bioaccumulative.

Alcohols, Ehoxylated (68439-46-3)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

Disodium Metasilicate (6834-92-0)	
Surface tension	No data available in the literature
Ecology - soil	Low potential for adsorption in soil.

Sodium Tripolyphosphate (7758-29-4)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.15 (log Koc, Experimental value)
Ecology - soil	Low potential for adsorption in soil.

Nitrilolriacetic acid, trisodium salt (5064-31-3)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.419 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

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

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not applicable
Proper Shipping Name (TDG) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable

14.3. Transport hazard class(es)

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

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

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

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

14.4. Packing group

Packing group (DOT) : Not applicable
Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
No data available

TDG
No data available

IMDG
No data available

IATA
No data available

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
Disodium Metasilicate	6834-92-0	Present	Active	
Sodium Tripolyphosphate	7758-29-4	Present	Active	
Nitrilolriacetic acid, trisodium salt	5064-31-3	Present	Active	
Alcohols, Ehoxylated	68439-46-3	Present	Active	XU

15.2. International regulations

CANADA

Disodium Metasilicate (6834-92-0)

Listed on the Canadian DSL (Domestic Substances List)

Sodium Tripolyphosphate (7758-29-4)

Listed on the Canadian DSL (Domestic Substances List)

Nitrilolriacetic acid, trisodium salt (5064-31-3)

Listed on the Canadian DSL (Domestic Substances List)

Alcohols, Ehoxylated (68439-46-3)

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 Tripolyphosphate(7758-29-4)	U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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

Revision date : 3/22/2017

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.

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.