K100 G+ (MG+, S+)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : K100 G+ (MG+, S+)

1.2. Recommended use and restrictions on use

Recommended use : Fuel additives
Restrictions on use : All other uses not recommended above

1.3. Supplier

Husky Corporation
2325 Husky Way
Pacific, Missouri 63069
United States of America
T 636-825-7200
SDS@Husky.com

1.4. Emergency telephone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA) CCN 828910

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2	Highly Flammable liquid and vapor
Acute toxicity (oral) Category 4	Harmful if swallowed
Acute toxicity (dermal) Category 3	Toxic in contact with skin
Acute toxicity (inhalation:dust,mist) Category 3	Toxic if inhaled
Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 1	Causes serious eye damage
Specific target organ toxicity (single exposure) Category 1	Causes damage to organs (visual organ, central nervous system)
Specific target organ toxicity – Single exposure, Category 3, Narcosis	May cause drowsiness or dizziness
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	May cause respiratory irritation

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : Highly flammable liquid and vapor
Harmful if swallowed

		Toxic in contact with skin or if inhaled Causes skin irritation Causes serious eye damage May cause respiratory irritation May cause drowsiness or dizziness Causes damage to organs (visual organ, central nervous system)
Precautionary statements (GHS US)	:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not breathe vapors, spray, mist, gas. Wash hands, forearms and face thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF exposed or concerned: Immediately call a POISON CENTER or doctor If swallowed: Call a POISON CENTER or a doctor if you feel unwell. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse. 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. In case of fire: Use alcohol resistant foam, carbon dioxide (CO2), dry sand, Extinguishing powder to extinguish. Store in a well-ventilated place. Keep container tightly closed. Keep cool. 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
Butan-1-ol	CAS-No.: 71-36-3	20 – 40	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335

Name	Product identifier	%	GHS US classification
2-Butoxyethanol	CAS-No.: 111-76-2	20 – 40	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
Primary alkyl alcohol*	CAS-No.: Trade Secret	10 – 30	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
Cyclic Secondary Amine*	CAS-No.: Trade Secret	< 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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 : If exposed: Call a physician immediately. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. Call a physician immediately.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately transport the casualty to an eye doctor / hospital. Continue rinsing during the transport with isotonic saline solution, alternatively with water.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a POISON CENTER or doctor/physician.

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

Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Irritation (itching, redness, blistering).

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

Symptoms/effects after ingestion : Harmful if swallowed.

Most Important Symptoms/Effects : Irritation to eyes, skin and respiratory tract. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

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 : Dry chemical, CO2, dry sand, or alcohol-resistant foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.

Explosion hazard : Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

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

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. No action shall be taken without appropriate training or involving any personal risk. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Use extinguishing media appropriate for surrounding fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all personal contact including breathing in the vapors, spray, mist, gas. Do not take actions involving personal risks. Absorb spillage to prevent material-damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, remove ignition sources, ventilate area. No open flames, no sparks, and no smoking. Prevent other non-emergency personnel from entering the danger area. Do not breathe vapors, spray, mist, gas. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate personnel to a safe area. Ventilate spillage area. Stop leak if safe to do so.

6.2. Environmental precautions

Do not let the product reach soil, drains, sewers, or surface and ground water.

6.3. Methods and material for containment and cleaning up

For containment : Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up	:	Take up in non-combustible inert absorbent and place into container for disposal. Use non-sparking tools. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations. Notify authorities if product enters sewers or public waters.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". 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. Avoid breathing vapors, spray, mist, gas. Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash hands, forearms and face thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Store in a cool, dry place. Protect from sunlight. Store in a well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Stored containers should be periodically checked for general condition and leakage.
Incompatible materials	:	Halogens. Strong acids, strong bases and strong oxidants. Amines. Ammonia. Acid chlorides. Metals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

K100 G+ (MG+, S+)

No additional information available

Cyclic Secondary Amine

No additional information available

Primary alkyl alcohol

USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	200 ppm
ACGIH OEL STEL	250 ppm
Remark (ACGIH)	TLV® Basis: Headache; eye dam; dizziness; nausea. Notations: Skin; BEI
Regulatory reference	ACGIH 2024
USA - ACGIH - Biological Exposure Indices	
BEI	15 mg/l Parameter: Methanol - Medium: urine - Sampling time: End of shift - Notations: B, Ns

Primary alkyl alcohol	
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	260 mg/m³
	200 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Butan-1-ol (71-36-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	n-Butanol
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	n-Butyl alcohol
OSHA PEL TWA	300 mg/m³
	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

2-Butoxyethanol (111-76-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	2-Butoxyethanol (EGBE)
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: Eye & URT irr. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	2-Butoxyethanol
OSHA PEL TWA	240 mg/m³
	50 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:

Chemically impervious gloves as described by OSHA's hand protection regulations in 29 CFR 1910.138 . The following materials are suitable for protective gloves: Butyl rubber, Nitrile rubber, Polyvinylchloride (PVC)

Type	Material	Permeation	Thickness (mm)	Penetration

Eye protection:

Type	Field of application	Characteristics
Safety glasses		With side shields

Skin and body protection:

Body protection should be chosen depending on activity and possible exposure. Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact

Respiratory protection:

Use NIOSH approved respirator if ventilation is inadequate. SCBA for emergency responders. Must be used in accordance with an OSHA complaint respiratory protection program.

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	:	Yellow Clear Transparent
Odor	:	Sweet ether-like Mild odor
Odor threshold	:	No data available
pH	:	8.6
Melting point	:	No data applicable
Freezing point	:	No data available
Boiling point	:	64 °C / 147.2 °F
Flash point	:	25.5 °C / 78 °F
Relative evaporation rate (butyl acetate=1)	:	0.41
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	4 mm Hg
Relative vapor density at 20°C	:	No data available
Relative density	:	0.85 (20 °C / 68 °F)
Solubility	:	Water: 100 %.
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	:	Lower explosion limit: 3.04 vol % (47 °C / 116.6 °F) Upper explosion limit: > 15.35 vol % (47 °C / 116.6 °F)
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

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Stable under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agents. Acid chlorides. Amines. Ammonia. Metals. Halogens.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Harmful if swallowed.
Acute toxicity (dermal)	:	Toxic in contact with skin.
Acute toxicity (inhalation)	:	Inhalation:dust,mist: Toxic if inhaled.

K100 G+ (MG+, S+)	
ATE US (oral)	324.341 mg/kg body weight
ATE US (dermal)	925.618 mg/kg body weight
ATE US (dust, mist)	0.521 mg/l/4h

Cyclic Secondary Amine	
LD50 oral rat	1900 mg/kg
LD50 oral	1050 mg/kg
LD50 dermal rabbit	≈ 500 mg/kg body weight

Cyclic Secondary Amine	
LD50 dermal	310 mg/kg
LC50 Inhalation - Rat (Vapours)	3.01 mg/l/4h
Primary alkyl alcohol	
LD50 oral rat	1187 – 2769 mg/kg body weight
LD50 dermal rabbit	17100 mg/kg body weight
LC50 Inhalation - Rat	> 20 mg/l/4h
Butan-1-ol	
LD50 oral rat	2290 mg/kg
LD50 dermal rabbit	3430 mg/kg
LC50 Inhalation - Rat (Vapours)	> 17.76 mg/l/4h
2-Butoxyethanol	
LD50 oral rat	1414 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight
LC50 Inhalation - Rat [ppm]	550 ppm/4h

Skin corrosion/irritation : Causes skin irritation.
pH: 8.6

Cyclic Secondary Amine	
pH	11
Skin corrosion/irritation, rabbit	Corrosive
2-Butoxyethanol	
Skin corrosion/irritation, rabbit	Mildly irritating

Serious eye damage/irritation : Causes serious eye damage.
pH: 8.6

Cyclic Secondary Amine	
pH	11
Butan-1-ol	
Serious eye damage/irritation, rabbit	Corrosive
2-Butoxyethanol	
Serious eye damage/irritation, rabbit	Moderately irritating

Respiratory or skin sensitization : Not classified

2-Butoxyethanol	
Guinea pig maximization test	Not sensitive

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Cyclic Secondary Amine	
IARC group	3 - Not classifiable

2-Butoxyethanol	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

Cyclic Secondary Amine	
NOAEL (animal/male, F0/P)	60 mg/kg body weight
NOAEL (animal/female, F0/P)	600 mg/kg body weight

STOT-single exposure : Causes damage to organs (visual organ, central nervous system). May cause drowsiness or dizziness. May cause respiratory irritation.

Primary alkyl alcohol	
STOT-single exposure	Causes damage to organs (visual organ, central nervous system).

Butan-1-ol	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

STOT-repeated exposure : Not classified

2-Butoxyethanol	
NOAEL (dermal,rat/rabbit,90 days)	> 150 mg/kg body weight

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Cyclic Secondary Amine	
Viscosity, kinematic	2.228 mm²/s

Butan-1-ol	
Viscosity, kinematic	3.641 mm²/s

Symptoms/effects after inhalation : Toxic if inhaled.

Symptoms/effects after skin contact : Toxic in contact with skin. Irritation (itching, redness, blistering).

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

Symptoms/effects after ingestion : Harmful if swallowed.

Most Important Symptoms/Effects : Irritation to eyes, skin and respiratory tract. Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination.

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.

Cyclic Secondary Amine	
LC50 - Fish [1]	179 mg/l
EC50 - Crustacea [1]	45 mg/l
LC50 - Fish [2]	180 mg/l
EC50 72h - Algae [1]	28 – 80 mg/l

Cyclic Secondary Amine	
NOEC (chronic)	5 mg/l
NOEC chronic fish	> 1 mg/l
NOEC chronic crustacea	5 mg/l
NOEC chronic algae	30.9 mg/l

Primary alkyl alcohol	
LC50 - Fish [1]	15400 mg/l
EC50 96h - Algae [1]	≈ 22000 mg/l
NOEC (chronic)	208 mg/l
NOEC chronic fish	446.7 mg/l

Butan-1-ol	
LC50 - Fish [1]	1376 mg/l
EC50 - Crustacea [1]	1328 mg/l
EC50 96h - Algae [1]	225 mg/l
ErC50 algae	225 mg/l
NOEC (chronic)	4.1 mg/l
NOEC chronic crustacea	4.1 mg/l

2-Butoxyethanol	
LC50 - Fish [1]	1474 mg/l
EC50 - Crustacea [1]	≈ 1800 mg/l
NOEC (chronic)	100 mg/l
NOEC chronic fish	≥ 100 mg/l

12.2. Persistence and degradability

Cyclic Secondary Amine	
Persistence and degradability	Readily biodegradable. 93 % biodegradation 25 d.

Primary alkyl alcohol	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Cyclic Secondary Amine	
BCF - Fish [1]	< 2.8
BCF - Other aquatic organisms [1]	≤
Partition coefficient n-octanol/water (Log Pow)	-0.84 (20 °C / 68 °F); pH 10.3
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

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

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions. U.S. - RCRA (Resource Conservation Recovery Act) - D Waste- Characteristic Waste Codes. D001: IGNITABLE WASTE.

Additional information : Flammable vapors may accumulate in the container. Do not re-use empty containers.

Ecological waste information : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
1993	1993	1993
14.2. Proper Shipping Name		
Flammable liquids, n.o.s. (1-butyl alcohol, primary alkyl alcohol)	Flammable liquid, n.o.s. (1-butyl alcohol, primary alkyl alcohol)	Flammable liquid, n.o.s. (1-butyl alcohol, primary alkyl alcohol)
14.3. Transport hazard class(es)		
3	3	3
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1993

DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 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.

IMDG

Special provision (IMDG)	:	223, 274
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP1, TP28
EmS-No. (Fire)	:	F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	:	S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG)	:	A
Properties and observations (IMDG)	:	Flammable liquid which is not specified by name in this class or, on account of its characteristics, in some other class. Toxic by skin contact or by inhalation.

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y343
PCA limited quantity max net quantity (IATA)	:	2L
PCA packing instructions (IATA)	:	355
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	366
CAO max net quantity (IATA)	:	220L
ERG code (IATA)	:	3P

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

All components of this product are present and listed as Active 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.

Methyl alcohol	CAS-No. 67-56-1	10 – 30%
Butan-1-ol	CAS-No. 71-36-3	20 – 40%

Primary alkyl alcohol

Listed on EPA Hazardous Air Pollutant (HAPS)

Primary alkyl alcohol	
CERCLA RQ	5000 lb

Butan-1-ol (71-36-3)	
CERCLA RQ	5000 lb

15.2. International regulations

CANADA

Cyclic Secondary Amine
Listed on the Canadian DSL (Domestic Substances List)

Primary alkyl alcohol
Listed on the Canadian DSL (Domestic Substances List)

Butan-1-ol (71-36-3)
Listed on the Canadian DSL (Domestic Substances List)

2-Butoxyethanol (111-76-2)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Cyclic Secondary Amine
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Primary alkyl alcohol
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Butan-1-ol (71-36-3)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

2-Butoxyethanol (111-76-2)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

WARNING: This product can expose you to Primary alkyl alcohol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision date : 9/5/2024

Full text of hazard classes and H-statements	
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H370	Causes damage to organs

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number

Abbreviations and acronyms	
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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.