

HAZARD |

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) |Flame |Gas Cylinder |Health Hazard |Exclamation
|Mark

Signal Word (GHS-US) |Danger

Hazard Statements (GHS-US) |Extremely flammable aerosol.

heated. |Contains gas under pressure; may explode if

|Harmful if inhaled.

|Causes serious eye irritation.

|Causes skin irritation.

|Suspected of damaging the unborn child.

|Suspected of causing cancer.

|May be fatal if swallowed and enters airways.

|May cause respiratory irritation.

|May cause drowsiness and dizziness.

|May cause damage to organs through prolonged or

|repeated exposure.

Precautionary Statements
use.
(GHS-US)
been

|Prevention: Obtain special instructions before

|Do not handle until all safety precautions have

|read and understood. Use personal protective

|equipment as required. Wear protective gloves.

Wear

|eye or face protection. Keep away from heat, hot

|surfaces, sparks, open flames and other ignition

|sources. No smoking. Pressurized container: Do not

|pierce or burn, even after use. Do not spray on an

|open flame or other ignition source. Use only

|outdoors or in a well-ventilated area. Do not

|breathe dust or mist. Wash hands thoroughly after

|handling.

unwell.

|Response: Get medical attention if you feel

|IF exposed or concerned: Get medical attention. IF

rest

|INHALED: Remove victim to fresh air and keep at

|in a position comfortable for breathing. Call a

|POISON CENTER or physician. IF SWALLOWED:

|Immediately call a POISON CENTER or physician. Do

of

|NOT induce vomiting. IF ON SKIN: Wash with plenty

Wash

|soap and water. Take off contaminated clothing.

|contaminated clothing before reuse. If skin

|irritation occurs: Get medical attention. IF IN

easy
persists:
Do

|EYES: Rinse cautiously with water for several
|minutes. Remove contact lenses, if present and
|to do. Continue rinsing. If eye irritation
|Get medical attention.
|Storage: Store locked up. Protect from sunlight.
|not expose to temperatures exceeding 50°C/122 °F.
|Store in a well-ventilated place.
|Disposal: Dispose of contents and container in
|accordance with all local, regional, national and
|international regulations.

2.3. Other Hazards
Other Hazards Not Contributing to the Classification:

2.4. Unknown Acute Toxicity (GHS-US)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance Name	Product identifier	%	Classification
			(GHS-US)
Acetone	67-64-1	24.0	
Propane	74-98-6	13.8	
Butane	106-97-8	13.2	
Toluene	108-88-3	8.0	
n-Butyl Acetate	123-86-4	5.2	
Xylene	1330-20-7	3.5	
Methyl Isobutyl Ketone	108-10-1	2.4	
Carbon Black	1333-86-4	0.8	
Ethylbenzene	100-41-4	0.6	

Full text of H-phrases: See Section 16

3.2. Mixture Name	Product identifier	%	Classification
			(GHS-US)

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General:

First-aid Measures After Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

First-aid Measures After Skin Contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

First-aid Measures After Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

First-aid Measures After Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2. Most important symptoms and effects, both acute and delayed Symptoms/Injuries:

Symptoms/Injuries After Inhalation: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.

Adverse symptoms may include the following: Respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal

malformations

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Adverse symptoms may include the following: Irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Eye contact: Adverse symptoms may include the following: pain or irritation, watering, redness.

Symptoms/Injuries After Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Adverse symptoms may include the following: Nausea or vomiting, reduced fetal weight, increase in fetal deaths, skeletal malformations

Chronic Symptoms:

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture Fire Hazard:

Explosion Hazard: Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion.

Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.

Reactivity:

5.3. Advice for Firefighters Precautionary Measures Fire:

Firefighting Instructions:

Protection During Firefighting: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures General Measures:

6.1.1. For Non-emergency Personnel Protective Equipment:

Emergency Procedures: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.1.2. For Emergency Responders Protective Equipment:

Emergency Procedures: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental Precautions
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and Material for Containment and Cleaning Up For Containment:

Methods for Cleaning Up: Small Spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute

with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Put on appropriate personal protective

equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Hygiene Measures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities Technical Measures:

Storage Conditions: Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible

materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

7.3. Specific End Use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

8.2. Exposure Controls Appropriate Engineering

Controls

|Use only with adequate ventilation. Use process
 |enclosures, local exhaust ventilation or other
 |engineering controls to keep worker exposure to
 |airborne contaminants below any recommended or
 |statutory limits. The engineering controls also
 |to keep gas, vapor or dust concentrations below
 |lower explosive limits. Use explosion proof
 |ventilation equipment.

need
 any

Personal Protective Equipment|

Materials for Protective |

Clothing |

Hand Protection
with

|Chemical-resistant, impervious gloves complying
 |an approved standard should be worn at all times
 |when handling chemical products if a risk
 |indicates this is necessary. Considering the

assessment

|parameters specified by the glove manufacturer,
 |check during use that the gloves are still
 |their protective properties. It should be noted
 |the time to breakthrough for any glove material
 |be different for different glove manufacturers. In
 |the case of mixtures, consisting of several
 |substances, the protection time of the gloves
 |be accurately estimated.

retaining
 that
 may

cannot

Eye Protection

|Safety eyewear complying with an approved standard
 |should be used when a risk assessment indicates
 |is necessary to avoid exposure to liquid splashes,
 |mists, gases or dusts. If contact is possible, the
 |following protection should be worn, unless the

this

protection: |assessment indicates a higher degree of
|chemical splash goggles.

Skin and Body Protection |Body protection: Personal protective equipment for
being |the body should be selected based on the task
|performed and the risks involved and should be
|approved by a specialist before handling this
|product. When there is a risk of ignition from
|static electricity, wear antistatic protective
|clothing. For the greatest protection from static
|discharges, clothing should include anti-static
|overalls, boots and gloves.

any |Other skin protection: Appropriate footwear and
|additional skin protection measures should be
|selected based on the task being performed and the
|risks involved and should be approved by a
|specialist before handling this product.

Respiratory Protection |Use a properly fitted, air-purifying or air-fed
a |respirator complying with an approved standard if
|risk assessment indicates this is necessary.
|Respirator selection must be based on known or
|anticipated exposure levels, the hazards of the
selected |product and the safe working limits of the
|respirator.

Thermal Hazard Protection |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties Physical State |Liquid.

Appearance |

Odor |Not available

Odor Threshold |Not available

pH |7

Relative Evaporation Rate |5.6 (butyl acetate = 1)
(butylacetate=1) |

Melting Point |

Freezing Point |

Boiling Point |Not available

Flash Point |Closed cup: -29°C (-20.2°F) [Pensky-Martens
|Closed Cup]

Auto-ignition Temperature |Not available

Decomposition Temperature	Not available
Flammability (solid, gas)	Not available
Vapor Pressure	13.5 kPa (101.325 mm Hg) [at 20°C]
Relative Vapor Density at 20 °C	1.55 [Air = 1]
Relative Density	0.79
Specific Gravity	
Solubility	Not available
Partition coefficient:	Not available
n-octanol/water	
Viscosity	Kinematic (room temperature): <0.07 cm ² /s
(<7	cSt)
	Kinematic (40°C (104°F)): <0.07 cm ² /s (<7
	cSt)
Lower Flammable Limit	1 %
Upper Flammable Limit	12.8 %

9.2. Other Information

Aerosol product

Type of aerosol : Spray

Heat of combustion : 0.0000252 kJ/g

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical Stability

The product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

Avoid all possible sources of ignition (spark or flame).

10.5 Incompatible Materials

No specific data.

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:

Skin Corrosion/Irritation:

Serious Eye Damage/Irritation:

Respiratory or Skin Sensitization:

Germ Cell Mutagenicity:

Carcinogenicity: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Reproductive Toxicity: Not available

Specific Target Organ Toxicity (Single Exposure):

Specific Target Organ Toxicity (Repeated Exposure):

Aspiration Hazard:

Symptoms/Injuries After Inhalation: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation. Adverse symptoms may include the following: Respiratory tract irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal malformations

Symptoms/Injuries After Skin Contact: Causes skin irritation. Adverse symptoms may include the following: Irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Adverse symptoms may include the following: pain or irritation, watering, redness.

Symptoms/Injuries After Ingestion: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach. Adverse symptoms may include the following: nausea or vomiting, reduced fetal weight, increase in fetal deaths, skeletal malformations

Chronic Symptoms:

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.2. Persistence and Degradability

12.3. Bioaccumulative Potential

12.4. Mobility in Soil

Not available.

12.5. Other Adverse Effects

No known significant effects or critical hazards.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Additional Information:

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT Proper Shipping Name |AEROSOLS

Hazard Class	2.1	[pic]
Identification Number	UN1950	
Label Codes		
ERG Number		

14.2 In Accordance with IMDG Proper Shipping Name |AEROSOLS

Hazard Class	2.1	
Identification Number	UN1950	
Label Codes		[pic]
ntification Of The		
Substance/m		
EmS-No. (Fire)		
EmS-No. (Spillage)		

14.3 In Accordance with IATA Proper Shipping Name |AEROSOLS, flammable

Identification Number	UN1950	[pic]
Hazard Class	2.1	
Label Codes		

Notification Of The	
Substance/m	
ERG Code (IATA)	

other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.