

1. Identification

Product identifier	LPS® TriFree®
Other means of identification	
Part Number	03620, C03620
Recommended use	A spray brake cleaner designed to remove oil, grease, brake fluid, brake pad material or dirt from motor vehicle brake mechanisms.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	ITW Pro Brands
Address	4647 Hugh Howell Rd. Tucker, GA 30084
Country	(U.S.A.)
	Tel: +1 770-243-8800
In Case of Emergency	1-800-424-9300 1-703-527-3887
Website	www.lpslabs.com
E-mail	lpssds@itwprobrands.com
Supplier	ITW Permatex Canada 1-35 Brownridge Road Halton Hills, ON, L7G 0C6 Canada 1-800-241-8334

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Compressed gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Not classified.	
Label elements		



Signal word	Danger
Hazard statement	Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye/face protection. Wear protective gloves.

Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	None known.
Supplemental information	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
ACETONE		67-64-1	50 - 60
Heptane, Branched, Cyclic and linear		426260-76-6	20 - 30
METHYLCYCLOHEXANE		108-87-2	10 - 20
CARBON DIOXIDE		124-38-9	1 - 5
PENTYL ACETATE		628-63-7	1 - 5

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Aspiration may cause pulmonary edema and pneumonitis.
Most important symptoms/effects, acute and delayed	Irritant effects. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Aspiration may cause pulmonary edema and pneumonitis.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Treat symptomatically. In case of shortness of breath, give oxygen. Keep victim under observation. Symptoms may be delayed.
General information	In case of shortness of breath, give oxygen. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Powder. Alcohol resistant foam. Water. Water spray. Dry chemicals. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Fire may produce irritating, corrosive and/or toxic gases. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. In the event of fire and/or explosion do not breathe fumes.

General fire hazards Extremely flammable aerosol.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Keep away from heat and sources of ignition. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
CARBON DIOXIDE (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
METHYLCYCLOHEXANE (CAS 108-87-2)	TWA	400 ppm
	STEL	100 ppm
PENTYL ACETATE (CAS 628-63-7)	TWA	50 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	1800 mg/m3
		750 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
CARBON DIOXIDE (CAS 124-38-9)	TWA	1200 mg/m3 500 ppm
	STEL	54000 mg/m3
	TWA	30000 ppm 9000 mg/m3
METHYLCYCLOHEXANE (CAS 108-87-2)	TWA	5000 ppm 1610 mg/m3
PENTYL ACETATE (CAS 628-63-7)	STEL	400 ppm 532 mg/m3
	TWA	100 ppm 266 mg/m3
	TWA	50 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
CARBON DIOXIDE (CAS 124-38-9)	STEL	15000 ppm
	TWA	5000 ppm
METHYLCYCLOHEXANE (CAS 108-87-2)	TWA	400 ppm
PENTYL ACETATE (CAS 628-63-7)	STEL	100 ppm
	TWA	50 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
CARBON DIOXIDE (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
METHYLCYCLOHEXANE (CAS 108-87-2)	TWA	400 ppm
PENTYL ACETATE (CAS 628-63-7)	STEL	100 ppm
	TWA	50 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	750 ppm
	TWA	500 ppm
CARBON DIOXIDE (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
METHYLCYCLOHEXANE (CAS 108-87-2)	TWA	400 ppm
PENTYL ACETATE (CAS 628-63-7)	STEL	100 ppm
	TWA	50 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
ACETONE (CAS 67-64-1)	STEL	2380 mg/m3
	TWA	1000 ppm 1190 mg/m3

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
CARBON DIOXIDE (CAS 124-38-9)	STEL	500 ppm 54000 mg/m3
	TWA	30000 ppm 9000 mg/m3
METHYLCYCLOHEXANE (CAS 108-87-2)	TWA	5000 ppm 1610 mg/m3
PENTYL ACETATE (CAS 628-63-7)	STEL	400 ppm 532 mg/m3
	TWA	100 ppm 266 mg/m3 50 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	25 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Chemical resistant gloves are recommended.

Other

Avoid contact with the skin. Wear appropriate chemical resistant clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal hazards

Not applicable.

General hygiene considerations

When using, do not eat, drink or smoke. Do not breathe dust. Avoid contact with clothing. Wash hands after handling. Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Liquid.

Physical state

Gas.

Form

Aerosol.

Color

Clear, Colorless.

Odor

Ether-like. Fruity.

Odor threshold

Not established

pH

Not applicable

Melting point/freezing point

Not established

Initial boiling point and boiling range

> 132.8 °F (> 56 °C)

Flash point

1.4 °F (-17.0 °C) Tag Closed Cup

Evaporation rate

> 1 (BuAc = 1)

Flammability (solid, gas)

Flammable gas.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

1.2 %

Flammability limit - upper (%)	12.8 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	> 75 mm Hg @ 20°C
Vapor density	~ 3 (air = 1)
Relative density	0.75 - 0.77 @ 20°C
Solubility(ies)	
Solubility (water)	55 % w/w
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not established
Decomposition temperature	Not established
Viscosity	Not established
Other information	
Heat of combustion	> 30 kJ/g
Percent volatile	100 %
VOC	45 % per U.S. State and Federal Consumer Product Regulations

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics	Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. Exposure may cause temporary irritation, redness, or discomfort. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Decrease in motor functions. Behavioral changes.
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Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways. Narcotic effects.
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Components	Species	Test Results
METHYLCYCLOHEXANE (CAS 108-87-2)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Canada - Alberta OELs: Irritant		
PENTYL ACETATE (CAS 628-63-7)	Irritant	

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
ACGIH Carcinogens	
ACETONE (CAS 67-64-1)	A4 Not classifiable as a human carcinogen.
Canada - Manitoba OELs: carcinogenicity	
ACETONE (CAS 67-64-1)	Not classifiable as a human carcinogen.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Narcotic effects.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
ACETONE (CAS 67-64-1)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) 4740 - 6330 mg/l, 96 hours
METHYLCYCLOHEXANE (CAS 108-87-2)		
Aquatic		
Fish	LC50	Striped bass (<i>Morone saxatilis</i>) 5.8 mg/l, 96 hours
PENTYL ACETATE (CAS 628-63-7)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) 65 mg/l, 96 hours

Persistence and degradability Expected to biodegrade.

Bioaccumulative potential No data available for this product.

Partition coefficient n-octanol / water (log Kow)

LPS® TriFree®	< 1
ACETONE	-0.24
METHYLCYCLOHEXANE	3.61
PENTYL ACETATE	2.3

Mobility in soil No data available.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Avoid discharge into water courses or onto the ground.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

TDG

UN number UN1950
UN proper shipping name AEROSOLS, flammable (Heptane), MARINE POLLUTANT
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not available.
Environmental hazards Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN1950
UN proper shipping name Aerosols, flammable (Heptane)
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Packing group Not available.
Environmental hazards Yes
ERG Code 10L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed with restrictions.
Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN1950
UN proper shipping name AEROSOLS, Flammable (Heptane), MARINE POLLUTANT
Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1
Packing group Not available.
Environmental hazards
Marine pollutant Yes
EmS F-D, S-U
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.

IATA; IMDG; TDG



Marine pollutant



15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

CARBON DIOXIDE (CAS 124-38-9)

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

ACETONE (CAS 67-64-1)

Precursor Control Regulations

ACETONE (CAS 67-64-1)

Class B

International regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

CARBON DIOXIDE (CAS 124-38-9)

Listed.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date	05-26-2016
Revision date	04-19-2017
Version #	02
Further information	HMIS® is a registered trade and service mark of the NPCA.
References	ACGIH EPA: ACQUIRE database NLM: Hazardous Substances Data Base US. IARC Monographs on Occupational Exposures to Chemical Agents Korea. Accidental Release Prevention Substances (Presidential Decree of Toxic Chemical Control Law, Executive Order No. 19203) Korea. Dangerous Substances Threshold Quantity (Presidential Decree of Dangerous Substances Safety Management Act No. 18406, Schedule 1) Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 29) Korea. Harmful Substances Requiring Permission for Manufacture or Use (Presidential Decree on the Industrial Safety and Health Act (No. 13053), Article 30) Korea. Non-Toxic Chemicals List (National Institute of Environment Research (NIER) Public Notice No. 1997-10, as amended) Korea. Observational Chemicals (Ministerial Decree of TCCL Article 6) Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor (MOL) Public Notice No. 1986-45, as amended) Korea. Prohibited Chemical Substances (TCCL Article 11) Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001, as amended) Korea. Restricted Chemical Substances (TCCL Article 11) Korea. Toxic Chemical Control Law (TCCL), Existing Chemicals Inventory (KECI) Korea. Toxic Chemical Control Law (TCCL), pre-1997 List Korea. Toxic Chemicals (TCCL Article 10) Korea. Toxic Release Inventory (TRI) Chemicals (TCCL Article 14) Taiwan. Dangerous Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials) Taiwan. Industrial Precursor Chemicals (Categories and Regulations Governing Inspection and Declaration of Industrial Precursor Chemicals, MOEA Decree No. 87, as amended) Taiwan. OELs. (Standards on Workplace Atmosphere of Dangerous and Hazardous Materials) Taiwan. Toxic Chemical Substances (TCS) (List of Toxic Chemical Substances announced by the Environmental Protection Administration) Taiwan. Toxic Materials (Rules on Hazard Communication of Dangerous Materials and Toxic Materials) HSDB® - Hazardous Substances Data Bank IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits GOST 30333-2007 - Chemical production safety passport. General requirements JIS Z 7252:2009 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS) Japan Chemical Industry Association (JCIA) GHS Guideline, June 2012
Disclaimer	This safety data sheet was prepared in accordance with JIS Z 7253:2012. Additional information is given in the Material Safety Data Sheet. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.
Revision information	Hazard(s) identification: Response Hazard(s) identification: Supplemental information Composition / Information on Ingredients: Ingredients GHS: Classification