Creation Date 2023/10/06

Safety Data Sheet

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Brake & Parts Cleaner 840ml(BPS-840)
Name of Supplier	TRUSCO NAKAYAMA Corporation
Address	4-28-1 Shimbashi, Minato-ku, TokyoTRUSCO Fiorito Building
Charge section	Quality Assurance Dept
Phone Number	0120-509-849
Fax Number	0120-509-839
Mail Address	techno.center@trusco.co.jp
Recommended Use of the Chemical	Detergent

Section 2 - HAZARDS IDENTIFICATION

GHS Classification of the Chemical

Physical Hazards	Aerosols-Category 1
Health Hazards	Serious eye damage/eye irritation-Category 2B
	Carcinogenicity-Category 1A
	Reproductive toxicity-Category 1A
	Specific target organ toxicity(single exposure)-Category 2(circulatory system)
	Specific target organ toxicity(single exposure)-Category 3(narcotic effects, Respiratory tract irritation)
	Specific target organ toxicity(repeated exposure)-Category 1(liver)
	Specific target organ toxicity(repeated exposure)-Category 2(central nervous system)
	Hazards except for cited above are Not classified or Classification not possible.

GHS Label Elements

Pictograms

Signal Word	Danger
Hazard Statements	Extremely flammable aerosol
	Pressurized container: may burst if heated
	Causes eye irritation
	May cause respiratory irritation
	May cause drowsiness and dizziness
	May cause cancer
	May damage fertility or the unborn child
	May cause damage to circulatory system
	Causes damage to liver through prolonged or repeated exposure
	May cause damage to central nervous system through prolonged or repeated exposure

Precautionary Statements

Prevention	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned, get medical advice and attention. Call a doctor if you feel unwell. Get medical advice and attention if you feel unwell. If eye irritation persists: Get medical advice and attention.
Storage	Protect from sunlight. Do not expose to temperatures exceeding 40 ℃. Store in a well-ventilated place keeping container tightly closed. Store locked up.
Disposal	Dispose of contents and container in accordance with local, regional, national and international regulations. Outsource the work to a professional waste disposal company.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance or Mixture: Mixture

Generic Name	Concentration or Its Ranges	Formula	ENCS No./ISHL No.		CAS RN
			Chemical Substances Control Act	ISHL No.	
Isohexane	50~70%	C6H14	(2)-6	Existing	73513-42-5
Ethanol	10~20%	C2H6O	(2)-202	Existing	64-17-5
Propane	5~15%	C3H8	(2)-3	Existing	74-98-6
Butane	2~6%	C4H10	(2)-4	Existing	106-97-8

Isobutane	2~6%	C4H10	(2)-4	Existing	75-28-5
carbon dioxide	1~3%	CO2	(1)-169	Existing	124-38-9

Impurities and/or Stabilizing Additives which Contribute to the GHS Classification: No information available

Industrial Safety and Health Act — Dangerous or Harmful Substances for Notification of Chemical Name etc. on SDS (Act, Art.57-2, Enforcement Order, Art.18-2 Item 1 and 2, Appended Table 9):
Ethanol(Government Ordinance Number:61)(20%～30%)
Butane(Government Ordinance Number:482)(Less than 10%)
Hexane(Government Ordinance Number:520)(60%～70%)

Section 4 - FIRST AID MEASURES

Inhalation

Call a doctor if you feel unwell.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

If exposed or concerned, get medical advice and attention.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice and attention.
If exposed or concerned, get medical advice and attention.

Eye Contact

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 and attention.
If exposed or concerned, get medical advice and attention.

Ingestion

Rinse mouth.
IF SWALLOWED: Call a doctor if you feel unwell.

If exposed or concerned, get medical advice and attention.
Being a volatile liquid, forcing to vomit increases risks such as aspirating into the lungs. Arrange medical treatment immediately. Also, have mouth rinsed thoroughly with water.

Never give anything by mouth to an unconscious person.

Section 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, alcohol-resistant foam, CO2, sand.

Unsuitable Extinguishing Media	Straight streams.
Specific Hazards	Risk of producing harmful gases such as carbon monoxide. Avoid inhalation of smoke or gases.
Specific Fire Fighting	In case of fire: Use appropriate media for extinction. Fight fire from upwind position if possible In surrounding fire, move containers instantly to safe place, if movable. Prohibit unauthorized staff from entering the area around the fire. Keep unnecessary people away.
Protection of Fire Fighter	Use goggles in combination with dust mask, and another protections as appropriate to situation.

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Use goggles in combination with dust mask, and another protections as appropriate to situation. Large spills :Evacuate area. Ensure adequate ventilation.
Environmental Precautions	Do not discharge into the drains, surface waters or ground water directly.
Methods and Materials for Containment and Cleaning up	small spill : absorb with material such as non-combustible materialwash thoroughly after handling Large spills: Dike spills and dispose of in safe area. If not harmful, evaporate and disperse while being careful of fire and ventilation. You may also spray water to accelerate the evaporation.
Secondary Disaster Prevention Measures	Keep away from sources of ignition and prepare extinguishing media. Avoid spreading product as it may cause accidents resulting in slips and falls. Do not recklessly walk on the spillage.

Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Use local exhaust ventilation in case of production of fume or mist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
	Precautions for Safe Handling	Fire Prohibited Pressurized container: Do not pierce or burn, even after use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not handle until all safety precautions have been read and understood.

		Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapours/spray. Obtain special instructions before use.
	Prevents Handling of Incompatible Substances or Mixtures	Refer to "10. Stability and reactivity".
	Specific Hygiene Measures	Wash hands thoroughly after handling.
Storage	Conditions for Safe Storage	Fire Prohibited Protect from sunlight and store in well-ventilated place. Protect from sunlight. Store locked up. Store in a well-ventilated place keeping container tightly closed. Keep in the special compressed-gas cylinder. The storage facility should be designed with fire-proof construction and beams should use a non-combustible material. The roof of a storage facility should be made of a non-combustible material and use metals or other lightweight non-combustible materials. No ceiling should be installed. The storage floor should be protected from water penetration, or should have water-proof construction. The storage floor should have penetration-proof construction against dangerous goods and be inclined adequately. A proper sump should be provided to catch any spills. The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.
	Safe Materials used in Packagings/Containers	No information available

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

	Japan	Permission concentration (Exposure Limits, Biological Exposure Indices)

	Administration Level	Japan Society for Occupational Health	ACGIH
Isohexane	Not listed	Not listed	Not listed
Ethanol	Not listed	Not listed	Listed(*)
Propane	Not listed	Not listed	Listed(*)
Butane	Not listed	500ppm(1200mg/m3)	Listed(*)
Isobutane	Not listed	500ppm(1200mg/m3)	Listed(*)
carbon dioxide	Not listed	5000ppm(9000mg/m3)	Listed(*)

*)Please refer to the following URL for ACGIH setting values.
Reference: https://www.acgih.org/

Engineering Controls		Use local exhaust ventilation in case of production of fume or mist. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use explosion-proof electrical equipment and prevent from static electricity.
Personal Protective Equipr	Respiratory Protection	If necessary, wear respiratory protection.
	Hand Protection	Wear protective gloves.
	Eye/Face Protection	Wear eye protection/face protection.
	Skin and Body Protection	Wear protective clothing.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State		Liquid
	Appearance	Liquid (undiluted)
Colour		Colorless and clear
Odour		Solvent odour
Melting Point/Freezing Point		No data available
Boiling Point or Initial Boiling Point and Boiling Ranges		No data available
Combustible		Combustible
Lower and Upper Explosion Limit / Flammability Limit	Lower	No data available
	Upper	No data available
Flash Point		-18℃ or less (undiluted)
Auto-Ignition Temperature		No data available
Decomposition Temperature		No data available
pH		No data available
Kinematic Viscosity		No data available
Solubility		water resistance

Partition coefficient: n-octanol/water (log value)	No data available
Vapour Pressure	No data available
Density and/or Relative Density	0.67
Relative Gas Density	No data available
Particle Characteristics	No data available

Section 10 - STABILITY AND REACTIVITY

Reactivity	No self-reactivity
Chemical Stability	Stable under normal conditions
Possibility of Hazardous Reaction	No self-reactivity
Conditions to Avoid	Contact with high temperatures, fire, oxidizing agents
Incompatible substances	oxidizing agents
Hazardous Decomposition Products	CO (carbon monoxide), etc. may be generated due to combustion, etc.

Section 11 - TOXICOLOGICAL INFORMATION

Acute toxicity	Oral	Not classified:Ethanol(toxicity value =6200mg/kg source: NITE), Isobutane(source: NITE), Butane(source: NITE), Propane(source: NITE) Classification not possible:carbon dioxide(source: NITE) No Data:Isohexane Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.
	Dermal	Not classified:Ethanol(toxicity value =20000mg/kg source: NITE), Isobutane(source: NITE), Butane(source: NITE), Propane(source: NITE) Classification not possible:carbon dioxide(source: NITE) No Data:Isohexane Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.
	Inhalation	(Acute toxicity (Inhalation : Gases)) Does not fall under gas based on GHS definitions. (Acute toxicity (Inhalation : Vapours)) Not classified:Ethanol(toxicity value =63000ppm source: NITE), Isobutane(source: NITE), Butane(source: NITE), carbon dioxide(source: NITE), Propane(source: NITE) No Data:Isohexane Contains substance of unknown toxicity. Changed from Not classified to Classification not possible. (Acute toxicity (Inhalation : dust/mist)) Unable to classify due to insufficient data.

Skin corrosion/irritation	Not classified:Ethanol(source: NITE), Isobutane(source: NITE), Butane(source: NITE), Propane(source: NITE) Classification not possible:carbon dioxide(source: NITE) No Data:Isohexane Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.
Serious eye damage/eye irritation	Category 2B:Ethanol(source: NITE) Not classified:Isobutane(source: NITE), Butane(source: NITE) Classification not possible:carbon dioxide(source: NITE), Propane(source: NITE) No Data:Isohexane The sum of the components in Category 2B ≧ Concentration limit(10%).Classification result = Category 2B.
Respiratory sensitization	Unable to classify due to insufficient data.
Skin sensitization	Unable to classify due to insufficient data.
Germ cell mutagenicity	Unable to classify due to insufficient data.
Carcinogenicity	Category 1A:Ethanol(source: NITE) Classification not possible:Isobutane(source: NITE), Butane(source: NITE), carbon dioxide(source: NITE), Propane(source: NITE) No Data:Isohexane Ethanol≧0.1%. Classification result = Category 1A. （Reproductive toxicity）
Reproductive toxicity	Category 1A:Ethanol(source: NITE) Classification not possible:Isobutane(source: NITE), Butane(source: NITE), carbon dioxide(source: NITE), Propane(source: NITE) No Data:Isohexane Ethanol≧0.3%. Classification result = Category 1A. （Reproductive toxicity, effects on or via lactation）
Specific target organ toxicity - Single exposure	No Data:Isohexane Category 1:Isobutane(organ=circulatory system source: NITE) Category 3:Ethanol(organ=narcotic effect、Respiratory tract irritation source: NITE), Isobutane(organ=narcotic effect source: NITE), Butane(organ=narcotic effect source: NITE), carbon dioxide(organ=narcotic effect source: NITE), Propane(organ=narcotic effect source: NITE) No Data:Isohexane

	Isobutane≧1%. Classification result = Category 2(circulatory system). The sum of the components in Category 3(narcotic effects) ≧Concentration limit(20%).Classification result = Category 3(narcotic effects). The sum of the components in Category 3(Respiratory tract irritation) ≧Concentration limit(20%).Classification result = Category 3(Respiratory tract irritation).
Specific target organ toxicity – Repeated exposure	Category 1:Ethanol(organ=liver source: NITE), Butane(organ=central nervous system source: NITE) Category 2:Ethanol(organ=central nervous system source: NITE) Classification not possible:Isobutane(source: NITE), carbon dioxide(source: NITE), Propane(source: NITE) No Data:Isohexane Ethanol≧10%. Classification result = Category 1(liver). Butane≧1%. Classification result = Category 2(central nervous system). Ethanol≧10%. Classification result = Category 2(central nervous system).
Aspiration hazard	Unable to classify due to insufficient data.

Section 12 – ECOLOGICAL INFORMATION

Ecotoxicity

Hazardous to aquatic environment short-term (acute)	Not classified:Ethanol(source: NITE)
	Classification not possible:Isobutane(source: NITE), Butane(source: NITE), carbon dioxide(source: NITE), Propane(source: NITE)
	No Data:Isohexane Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.
Hazardous to aquatic environment long-term (chronic)	Not classified:Ethanol(source: NITE)
	Classification not possible:Isobutane(source: NITE), Butane(source: NITE), carbon dioxide(source: NITE), Propane(source: NITE)
	No Data:Isohexane Contains substance of unknown toxicity. Changed from Not classified to Classification not possible.
Persistence and degradability	No information available

Bioaccumulative potential	No information available
Mobility in soil	No information available
Hazardous to the ozone layer	Unable to classify due to insufficient data.

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste	Dispose of contents and container in accordance with local, regional, national and international regulations. Outsource the work to a professional waste disposal company. Comply with the standards for The Special Control Industrial Wastes under the Waste Disposal Public Cleansing Law (Japan) to dispose of the concerned wastes.
Contaminated Container and Packaging	Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments. In case of disposal of empty containers, remove the content thoroughly.

Section 14 – TRANSPORT INFORMATION

International Regulations	Regulatory Information by Sea	Complied with IMO.
	UN No.	1950
	Proper Shipping Name.	AEROSOLS
	Class	2.1
	Marine Pollutant	Not applicable
	Transport in bulk according to MARPOL 73/78,Annex Ⅱ,and the IBC code	Not applicable
	Regulatory Information by Air	Complied with ICAO/IATA.
	UN No.	1950
	Proper Shipping Name.	AEROSOLS
	Class	2.1
Regulations in Japan	Regulatory Informatio	Complies with the Fire Service Act.
	Regulatory Informatio	Complies with the Marine Transportation Safety Act
	UN No.	1950
	Proper Shipping Nam	Aerosols
	Class	2.1
	Marine Pollutant	Not Applicable
	Transport in bulk according to MARPOL 73/78,Annex Ⅱ,and the IBC code.	Not Applicable

Regulatory Informatio	Complies with the Civil Aeronautics Act
UN No.	1950
Proper Shipping Nam	Aerosols
Class	2.1
Specific Safety Measures	Before transport containers shall be examined for external signs of damage, corrosion, leakage, etc. In transport, loading of containers should be ensured protection from sunlight, to prevent damage, corrosion, leakage, and collapse of the load. Do not stack heavy goods. Carry a yellow card when transferring.
Emergency Response Guide Number	126

Section 15 - REGULATORY INFORMATION

Three laws requirering offer of SDS	
Industrial Safety and Health Act	Applicable
Poisonous and Deleterious Substances Control A	Not Applicable
Act for PRTR and Promotion of Chemical Management	Not Applicable
Main applicable domestic laws and regulations	
Industrial Safety and Health Act	Dangerous or Harmful Substances for Labeling of Chemical Name etc. (Act Art.57 Para.1, Enforcement Order, Art.18 Item 1 and 2, Appended Table No.9)(Ethanol、Butane、Hexane) Dangerous or Harmful Substances for Notification of Chemical Name etc. on SDS (Act, Art.57-2, Enforcement Order, Art.18-2 Item 1 and 2, Appended Table 9)(Ethanol、Butane、Hexane) Dangerous Substances, Flammable Substances (Enforcement Order, Art., Appended Table 1, Item 4) Dangerous Substances, Flammable Gases (Enforcement Order, Art., Appended Table 1, Item 5)
Fire Service Act	Group 4, Flammable Liquids, Class 1 Petroleums, Water-insoluble liquids (Act, Art.2, Para.7, Appended Table 1, Group 4, Item 2, Note No. 12)
Ship Safety Act	Gases (Regulations for the Carriage and Storage of Dangerous Goods in Ships, Art.3, Notification for Establishing Standards for the Carriage of Dangerous Goods in Ships.,Appended Table 1)
Civil Aeronautics Act	Gases (Ordinance for Enforcement, Art.194, Notification for Establishing Standards for the Carriage of Explosives etc., Appended Table 1)
Waste Management and Public Cleansing Act	Specially Controlled Industrial Wastes, (Act, Art.2, Para.5, Enforcement Order, Art.2-4)

Section 16 - OTHER INFORMATION

Technical Contact	TRUSCO NAKAYAMA Corporation
Literature	NITE GHS Classification published data EU CLP Regulation, AnnexVI
Disclaimer	The statements herein are made by the generally available data and our own data, however we are not able to investigate all of the present scientific and technology information, therefore we do not guarantee any matters. And the attention matters are in regard of generally handlings, so the user shall take care with the special attention to the special handlings.